Program evaluation is “…the systematic assessment of the operation and/or outcomes of a program or policy, compared to a set of explicit or implicit standards as a means of contributing to the improvement of the program or policy…” (Weiss, 1998).

Types of Evaluation

There are several types of evaluations and they vary depending on the program being evaluated and the purpose of the evaluation. However, the different evaluation types can be divided into two major categories: formative and summative evaluation. Formative evaluations help improve or strengthen the program under evaluation by assessing how the program is delivered, the quality of its implementation, and the context of the program e.g., personnel, procedures, and so on (Trochim, 2006). Summative evaluations attempt to quantify the effects of a program and may examine causal relationships.

Formative Evaluation

There are several types of formative evaluation:

- **Needs assessment** identifies a need, its scope and possible solutions. Determining the number of students at-risk to fail high-stakes math tests, and determining their areas of weakness and identifying potential programs to address those weaknesses would fall under needs assessment.

- **Evaluability assessment** determines the practicability of an evaluation and how various stakeholders can help nurture its effectiveness. Determining the requirements for implementing various remediation programs, and the financial/personnel resources available to address the requirements and track the results would be an evaluability assessment.

- **Structured conceptualization** facilitates stakeholders’ conceptualization of the program, the target population, and the possible outcomes. Asking how a remediation program might be set up to best fit within current the school’s current programs would involve structured conceptualization.

- **Implementation evaluation** tracks the fidelity of the program; that is, whether the project is being carried out as planned. Determining whether all targeted at-risk students are being served by a tutoring project would be an implementation evaluation.

- **Process evaluation** looks into the process of program delivery and other possible delivery procedures; it asks whether current procedures could be improved. Determining why a subset of at-risk students is not participating in a project’s afterschool tutoring program in order to improve attendance would be a process evaluation.

Summative Evaluation

The different types of summative evaluation are outlined below:
• **An outcome evaluation** probes whether the program resulted in quantifiable effects on target populations. Continuing the examples above, determining the improvement in math scores for the at-risk students would be an outcome evaluation. Outcomes are understood to be different than *outputs*; outputs are implementation or process measures (how many sessions held, how many students served), while outcomes are a summative measure (what has changed for the target group in terms of learning, behavior, attitude, etc.).

• **Impact evaluation** appraises the overall effects of the program – intended and unintended. An impact evaluation of the math remediation program might look at overall math scores for the entire student population as a result of the interventions to determine if AYP status was positively affected.

• **Cost-effectiveness** analyzes the efficiency of the program by regulating outcomes based on their dollar cost. For example, a school might want to determine whether enough students were served by the remediation program or whether a way needs to be found to serve more students with the same funds.

• **Secondary analysis** reviews current data to tackle new questions or use alternative methods not yet considered. For example, a secondary analysis could examine whether there are commonalities among students who did not benefit from participation in the remediation program; information that could be used to develop a program to address their needs.

• **Meta-analysis** combines the outcome estimates from a variety of studies to make an overall conclusion on an evaluation question (Trochim, 2006). A common use of meta-analysis is for evaluation of Best Practices.

**Planning an Evaluation**

Before beginning an evaluation, some basic parameters must be established and a methodical plan must be mutually agreed upon by all relevant stakeholders. The following components constitute what must be decided when designing a comprehensive evaluation:

• The objective of the formative or summative evaluation
  o A common goal for most evaluations is to provide feedback that will be helpful to the targeted audiences e.g., clients, staff, administrators, and students.

• Questions we are trying to answer
  o **Sample questions for formative evaluations:**
    • What and where is the problem?
    • How serious is the problem?
    • How should the program be delivered to deal with the problem?
    • How well is the program delivered?
    • How can the program be improved?
  o **Sample questions for summative evaluations:**
    • To what extent does the program work (what was the outcome)?
- Should the program be improved (is there still unmet need)?
- Is the program worthwhile?
- Is the program appropriate and useful?
- What methodology we will use to undertake the evaluation
  - What resources do we need?
  - What data do we have to collect?
  - What types of analyses will address the questions we have posed?
  - Do we have current, appropriate, baseline data for our measures?
- How to make the results useful to stakeholders
  - Who are the primary stakeholders?
  - Do any stakeholder groups require additional or specific information?
  - How will we communicate the results of the evaluation to each of the different stakeholders?
  - Will the results provide clear guidance for improvement of the program and its implementation?

Evaluators should strive to design comprehensive evaluations that allow for the collection of both outcome data and rich process data (Ham, 2010).

**The Process of Evaluation**

The process of evaluation is a continuous loop of steps where each step provides important information for the subsequent step. Each cycle may require a different type of evaluation (e.g. starting with needs assessment, then process, then impact) as a program develops and is implemented. Below are the main steps in the evaluation process as adapted from (Schackman. 1999).

- Engage stakeholders
- Describe the program
- Focus the evaluation design
- Ensure use and share Lessons learned
- Justify conclusions
- Gather credible evidence

It is essential to plan and document each step in the loop as it is conceived and executed. Documentation that proceeds along with planning ensures that everyone has common expectations for the evaluation, and that steps are not missed as the project progresses. Careful documentation during implementation will prevent loss of data and assist in timely dissemination of all information. Attention to timely dissemination helps maintain interest and engagement among all participants. Finally,
attention to documentation and dissemination as each step is completed encourages use of results and implementation of recommendations. The documentation also provides a current record that can assist new personnel joining the project at any stage, and can be used to fulfill accountability requirements.

