#### KAMEHAMEHA SCHOOLS RESEARCH & EVALUATION DIVISION

## RESEACH & EVALUATION

FEBRUARY 2010





## KAMEHAMEHA SCHOOLS

# Timing is Everything:

Using Program Monitoring and Evaluation to Support the Development of Effective and Efficient Programs<sup>1</sup> By Katherine A. Tibbetts, PhD.

## Purpose of This Report

The purpose of this report is to present a strategy for using program monitoring and evaluation resources efficiently and effectively to maximize the use of increasingly scarce resources to achieve organizational goals. This report has been updated and reissued in part due to the current economic context, which increases our awareness of the need for pragmatic and rapid responses to emerging issues and questions.

## Highlights

- Program monitoring and evaluation resources are used most effectively when they are aligned with the developmental stage of the program and the policy context for decision-making.
- Practices that help assure this happens include:
  - matching the rigor of monitoring and evaluation activities to the key questions and degree of certainty required for good decisionmaking.
  - o developing logic models or other means of articulating a program's theory of change,
  - o including staff members with expertise in monitoring and evaluation during program development,
  - o actively engaging program staff in monitoring and evaluation to enhance the validity of inferences and to increase use of findings in ongoing program development, and
  - developing and implementing performance dashboards for mature programs.

1 This paper is an updated and abbreviated version of the previous paper Timing is Everything: Getting the Questions Right at Each Stage of Program Development by K. A. Tibbetts and D. Nahoʻopiʻi, May 2006.

#### **ESP**EEDOMETER

**SP1** = **Prenatal to 8-years** (Optimize and Build) SP2 = Grades 4 to 16 and post-high (Sustain Momentum) SP3 = Kamehameha Schools Campuses, K to 12 (Innovate and Optimize)

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## Background

In the realm of program development and delivery, two needs are often in competition: (a) delivering effective programs in a costefficient manner and (b) moving programs into communities expeditiously. What is needed is a strategy to achieve balance between these needs, minimizing the risks of moving either too quickly or too slowly. Matching monitoring and evaluation activities to a program's developmental stage promotes the development of effective and efficient programs while increasing the cost-effectiveness of monitoring and evaluation.

## The Framework

KS has committed to actively monitoring programs to provide information about program effectiveness in support of continuous improvement. KS has also committed to more extensive investigation (i.e., evaluation) for selected programs and strategic initiatives. How we work is as important as what we do. Both program monitoring and evaluation are guided by collaborative teams that include members with content-area and program monitoring and evaluation expertise. Through use of these collaborative teams we can help ensure that program decisions are based on sound, appropriate data and increase the likelihood that the findings will be utilized (Preskill and Torres, 1999; Robert Wood Johnson Foundation, 2009; Stake, 2004; Weiss, 1998).

We suggest that the more intense examination (and use of resources) associated with evaluation is warranted for programs in the early developmental stages. In these stages we are concerned with assessing the potential impact of new or developing initiatives.

Evaluation is also warranted when the results of program monitoring generate concerns or the policy environment is highly competitive (for example, when alternative program models for accomplishing a particular goal are under consideration). In this case a comparison of relative effectiveness of the various models is needed. As programs move from one stage to another, the key evaluative questions also change. A list of likely evaluative questions for each developmental stage is provided below. <sup>2,3</sup>

#### Definitions

At KS, *program monitoring* focuses on factors that are within the boundaries of the program for the purpose of continuous improvement. For example, use of resources, program activities, and short-term outcomes.

*Program evaluation* builds upon program monitoring data. It expands the monitoring data by increasing emphasis on factors outside the boundaries of program planning and operations and by looking more closely at program processes and effects, including long-term outcomes.

#### Stage 1: Conceptual

Stage 1 ConceptualThis stage is characterized by exploration of concepts, development of theoretical models (e.g., logic models and/or theory of change) and preliminary plans for implementation. Ideally, it includes an assessment of needs, internal and external environmental scans, and analysis of best or promising practices.	<ul> <li>Key Questions</li> <li>(a) What are the needs or opportunities the program is intended to address?</li> <li>(b) What is the match between the proposed program and the community characteristics [external environmental scan]?</li> <li>(c) What is the match between the proposed program and the institutional mission, goals, and resources [internal environmental scan]?</li> <li>(d) What is the capacity of the organization to effectively implement the program (including finances and core competencies)?</li> </ul>
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<sup>2</sup> The program stages are based on the work of Lee J. Cronbach and associates (1980) as presented in Toward Reform of Program Evaluation.

<sup>3</sup> The evaluative questions are based on the work of Francine Jacobs (1988) as reported in her chapter on the Five-Tiered Approach to Program Evaluation.

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## Stage 2: Empirical Pilot

Stage 2 Empirical PilotDuring this stage program components are observed in action on a small scale. Program components are readily modifiable and there may be systematic variation of components to identify those that offer the most promise in the actual program context.	<ul> <li>Key Questions <ul> <li>(a) Are the intended program participants engaged and in what numbers? If not, what barriers, if any, exist to participation by members of the target population?</li> <li>(b) What are the challenges to implementation as planned and what adaptations to the original program model have been made?</li> <li>(c) If variations on the model or components have been tested, which are most effective and why?</li> <li>(d) What does existing evidence say about the potential of the program to achieve the desired effects and what are the unintended effects (both positive and negative)?</li> <li>(e) What further adaptations are indicated by the results to date? (Evolution of the program logic or theory of change?)</li> <li>(f) What are the actual costs and what are the projected costs of operation as any developmental costs fade?</li> <li>All leading ultimately to</li> <li>(g) Is a larger-scale test of the program reasonable?</li> </ul> </li> </ul>
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## Stage 3: Field Test

Stage 3 Field Test	The field test is a careful assessment of what the program can accomplish under realistic conditions. The program is closely aligned to recommendations from the Empirical Pilot but some adjustments may continue. A key characteristic of this stage is the limitation in scope and time.	<ul> <li>Key Questions</li> <li>The questions from the Empirical Pilot continue to be relevant as the scope of the program broadens. Additional questions include: <ul> <li>(a) Did we obtain the results predicted by the data from the pilot?</li> <li>(b) Have new implementation issues arisen and what are the implications of these if the program is to continue?</li> <li>(c) Are there differential impacts on sub-groups of participants?</li> <li>And, ultimately,</li> <li>(d) Is the program effective and sustainable?</li> </ul> </li> </ul>
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## Stage 4: Mature

Stage 4 Mature	At this stage a program has successfully passed through the previous three stages. Historical results have demonstrated the effectiveness of the strategy. The program has a stable budget and organizational niche.	<ul> <li>Key Questions</li> <li>(a) Is the program continuing to be effective?</li> <li>(b) Are there ways in which we can increase effectiveness?</li> <li>(c) Are there ways in which we can increase efficiency?</li> <li>Where resources are available and it is consistent with the institutional mission, the questions asked may go beyond the program itself to</li> <li>(d) What have we or can we learn from the program to increase the knowledge-base and contribute more broadly to theory and practice?</li> <li>(e) What are the long-term effects? (Understanding these may require multiyear efforts and sometimes intensive and complex data collection to assess.)</li> </ul>
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#### Stage 5: Reinvention

Programs may enter the Reinvention from any other stages. Reasons for this include, but are not limited to having met a defined need, because their effectiveness is less than that of an alternative model, or due to changes in organizational priorities or capacities.	<ul> <li>Key Questions</li> <li>(a) What were the challenges, if any, encountered by the program? And,</li> <li>(b) What were the strengths and limitations of the program when confronted by those challenges?</li> <li>(c) What are the implications for future programs or other programs with comparable internal or environmental characteristics?</li> </ul>
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#### Summary

Program monitoring data, as defined by KS, is collected as a part of ongoing program operations for the purpose of continuous improvement. Hence, with a reasonably efficient supporting infrastructure, key indicators can be made available to decision-makers on an ongoing basis at relatively low cost. These data are always important and may be sufficient when the key questions are about ongoing program improvement. The program dashboards currently being developed at KS are examples of this in action.

Evaluation studies are more intensive than program monitoring and can vary widely in scope, cost, and time requirements. They are most necessary when we need to establish the merit or worth of a program. There are a number of methods for limiting the time and dollar costs of evaluation projects while maintaining a reasonable level of integrity (but with less conclusive evidence of cause and effect). These methods may be most appropriate when the key questions relate to the impact of the program, rather than to establishing the means by which it achieves those impacts. The strategies include reducing the amount of data collected from comparison groups, reducing the number of outcomes studied, use of smaller samples, and using strategies and tools to reduce the cost of data collection and analysis (Bamberger, Rugh, and Mabry, 2006).

The decision to use a more versus less rigorous evaluation methodology should be informed by the consequences of making an error, the decision-making timeline, the resources available, and the feasibility of collecting or accessing data from control or comparison groups or longitudinal data from the participant group.

By tailoring our program monitoring and evaluation activities to the developmental stages of programs and the contexts within which they operate, we can increase the likelihood of achieving our strategic goals. At the same time we can ensure that we use program monitoring and evaluation resources efficiently.

## References

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