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ABSTRACT

This article describes the stages of a formative evaluation process for a professional development project. It was designed to support teachers in urban schools as they implement student-centered practices. The four stages of the evaluation that can serve as a road map for this type of collaboration are: (1) the program vision and anticipated changes in practice; (2) identification of teacher leaders and their responses to the professional development program; (3) the impact on teachers and students; and (4) the changes made to the professional development program. The article concludes that: the early development of an observation tool can help to focus staff development programs; adequate time should be provided for examining the impact on the the participants' students; the collection of data should provide answers to the questions of "for whom" and "under what conditions" the staff program works; and formative collaboration between program developers and an outside educator will serve to get the program on track early and keep the project on track. (SM/SEP)

RUNNING HEAD: How will we know success?

Formative Evaluation of Professional Development: *How will we know success?*

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Abstract

In this article, we describe the stages of a formative evaluation process for a professional development project. The professional development project's focus was to support teachers in urban schools to implement student-centered practices. The purpose of this article is to highlight what we learned about formative evaluation and the importance of formative evaluation in shaping the professional development project.

Formative Evaluation of Professional Development: *How will we know success?*

With today's focus on outcomes and accountability, those of us who provide professional development are often asked for summative evaluation (i.e., "did it work?") done by an outside evaluator at the end of a project. Yet, it is often more useful to engage in formative evaluation as a way to not only shape our work but also to help us attribute desired outcomes to our work.

In this article, we describe what we learned from a formative evaluation project in which an outside evaluator and program staff collaborated (see Figure 1 for a description of this project). We have conceptualized four "stages," or conceptual periods, which serve both as a "road-map" for this type of collaboration and the organizing structure for this article. Table 1 highlights the key focus questions for each stage.

Stage 1: What is the program vision and what are the anticipated changes in practice?

An essential stage in evaluating a program is defining it so that linkages between program inputs and outcomes can be made. To do this, we must essentially spell out the program's key assumptions, moving beyond the general goals typically articulated at the outset of a project. For us, an important strategy was to have program staff define "success" (i.e., program outcomes). Then, starting with these indicators of success, we worked to link them to what should be specific program inputs. This process included defining the program's philosophical approach to working with teachers. Connell and Klem (2000) refer to this process as articulating a program's "theory of change."

Although this sounds simple, we learned it is a complex and thought-provoking process involving an interplay of sometimes competing goals. For example, program staff noted the importance of meeting "teachers where they are." Just as program staff felt that teachers should meet individual student needs, they felt it was important for themselves to

meet individual teacher needs. However, such an orientation can be difficult for evaluation research where "fidelity of implementation" is critical for making any conclusions about program effectiveness. Thus, the evaluator's role was to focus program staff on clarifying the program to move them beyond the arena of individual teachers.

Another focus area during this stage was designing outcome measures. One important measure was an observation tool to assess level of implementation by teachers, which could be used to evaluate the professional development activities. Later, this information would be important for linking teachers who implemented the key instructional practices to student learning outcomes. A significant challenge for program staff was to conceptualize essential instructional features. Our dialogues often focused on the question, "What are the core practices that we would see in a student centered classroom?"

Providing uniform consultation and coaching to the teachers also posed a challenge. One lengthy project discussion focused on data that indicated high variability amongst program staff on their provision of feedback and suggestions. For example, one program staff tended to focus on classroom climate issues; another focused on reading strategies; and another focused primarily on scheduling and organizational structures within the classroom. Each program staff appeared to focus on areas in which they had the most expertise. There was also variability on how much staff "pushed" teachers to implement strategies from the observation measure. Given that the success of the program would be based on this instrument, program staff agreed to focus coaching sessions towards increasing levels of implementation on these practices and to make the process more uniform.

Stage 2: Who are our teacher learners and how are they responding to the professional development program?

Just as teachers need to know their students to be effective in their teaching, program staff needed to understand the participants in their program. This is generally a

cornerstone of professional development efforts (Guskey, 1997), and for this reason, many programs gather pertinent background information on their participants. We know that by approaching teacher participants as unique individuals with a diverse range of attitudes, concerns, and skill levels, the content and structure of the program can better meet teachers' needs. We were also interested in understanding for whom the program would likely be successful, given the resources that we had and our need to fairly quickly link impacts to teachers' students.

Based on analysis of teacher-completed *Stages of Concern* surveys (Loucks-Horsley, Newlove, & Hall, 1975), which identifies teachers' concerns when innovations are introduced, we learned that our teacher participants were mostly concerned with informational, management, and collaboration needs. As a result, program staff focused on addressing these concern areas. In addition, we analyzed responses on the *Reflection on Teaching Scale* (Gibson & Dembo, 1984), which measures the level of teacher efficacy. Data from this scale helped us to focus on building teachers' sense of efficacy where indicated, because research tells us that teaching efficacy can be an important contributor to whether teachers implement innovative teaching practices (Fritz & Miller-Heyl, 1995; Guskey, 1988). Later, we wanted to see if this information would be relevant for helping us identify for whom the program would be successful, or whether it would be an important teacher outcome measure that would link to positive student outcomes.

Another way we could assess whether teachers were likely to implement specific practices was through a survey that teachers completed following each workshop. Teachers were asked to reflect on the training workshop in four categories: 1) whether they understood the strategy presented; 2) whether they viewed the specific strategy as being important; 3) whether the strategy appeared to "fit" for their classroom situation; and 4) their

plans for implementing the strategy. With feedback across these four dimensions, we were able to pinpoint barriers to implementation and respond more appropriately to teachers' needs.

Stage 3: What is the impact on teachers' students?

Discussions amongst program staff led us to wonder how we could be certain that student outcomes could in fact be due to our professional development program. This is particularly complex, since many schools currently are engaged in a myriad of activities that could have potential impacts on student outcomes. Given our "theory of change" that was developed as part of Stage 1, we felt that there should be a linkage between teachers' level of implementation and student outcomes. We believed that if teachers were implementing the practices, then their students should have more positive outcomes than the teachers who were not implementing the practices. This guided our subsequent statistical analyses, and emerging findings indicated that the lower performing students actually showed the most gains if they were with a teacher who was a "high implementor."

Stage 4: What changes need to be made to the professional development program?

Because this was a formative evaluation project, we were also concerned with using the information gathered to inform future programs. Based on our examination of all the data, this stage was characterized as a time in which the program features were re-examined, and some areas were dropped while others were given more attention. For example, based on the teacher data, it was clear that most still needed support to use student assessments and assessment data to inform their teaching. In addition, program staff realized that the content covered during the first year should be revisited during subsequent workshops so that the concepts could be solidified for teachers.

Conclusion and Implications

Reflection on the current evaluation project led to the creation of a "road-map" that is useful for helping us understand the key process or stage in which we are engaged. We believe that developing this common framework between program evaluators and program developers is critical to a useable evaluation. In addition, we believe the following lessons are important for practice, particularly for those who fund professional development programs, those who design them, and those who evaluate them.

Early development of an observation tool can help to focus a staff development program.

Especially for program developers who are seeking to work with an evaluator, the process involved in creating an evaluation tool actually helps to refine and specify the program's goals and visions. In other words, the process itself helps to clarify what the program seeks to accomplish. Further, creation of an observation tool forced us to articulate a specific practice in observable terms. As Morris and Fitz-Gibbon (1985) note, "You cannot evaluate something without describing what that something is" (p. 8).

It is essential to have adequate time before examining the impact on participants' students.

Professional development programs are increasingly being asked to show the impact of their programs on student achievement. Funders and school district sponsors of professional development are anxious to see gains by the end of the first or second year of training. Staff developers are often put in the position of making claims that particular innovations will increase student achievement before it is known whether the training provided resulted in a change in practice, or whether there has been sufficient change in practice to have an impact on student learning. Unfortunately, this may lead to erroneous conclusions about a particular professional development program. Some programs might indicate results in improved student learning, despite the fact that few teachers actually

implemented the intended practices. Still, another program might indicate lack of improved student learning, however, the program may actually be quite successful in improving student learning but not enough teachers implemented the practices to a sufficient degree. In our experience, high levels of implementation could reasonably take more than two years to develop.

Data collected can help us answer for whom and under what conditions the staff development program works.

One important outcome of a formative evaluation process is that we can begin to explore one critical question: "For whom does the program development program work, and under what conditions?" Those responsible for professional development programs are often interested in this question, given the limited resources that many programs face. In this project, we collected a variety of information on the teacher learners that was then used to extend our understanding of teachers who subsequently utilized the practices to a fairly high level of implementation. Some evaluation projects refer to this as "readiness indicators." Unfortunately, programs rarely collect the kind of information that can answer the question "for whom and under what conditions?" Consequently, programs may find themselves being less efficient with the available resources. We have found that we need to move beyond "buy-in" criteria that are typically based on teachers agreeing to be part of a professional development program. In our experience, there are many reasons that teachers may agree to participate in a professional development program, and not all reasons necessarily result in participants who will implement new practices to a high degree. Unfortunately, in times of scarce resources, we will need a way to decide where best to put our efforts and resources.

Formative collaboration between program developers and an outside evaluator serves to get the program on track early, and keep it on track.

Formative evaluation that begins at the outset of a professional development program can help sharpen program objectives and strategies, which leads to maximizing the potential benefit of the program to teachers and their students. Program staff have a vested interest in the success of their work as they have designed it and can be insensitive to needed changes. The importance of another set of eyes provided by a program evaluator is described by Morris and Fitz-Gibbons (1985):

> The formative evaluator's job is not only to describe the program, but also to keep a vigilant watch over its development and to call the attention of the program staff to what is happening. Program monitoring in formative evaluation should reveal to what extent the program as implemented matches what its planners intended, and should provide a basis for deciding whether parts of the program ought to be improved, replaced, or augmented. (p. 14)

Thus, formative evaluation not only helps define the professional development program's goals and methodology, it ensures that implementation is consistent and that student outcomes can be attributed to the use of classroom strategies promoted by the program.

References

Connell, J. P., & Klem, A. M. (2000). You can get there from here: Using a theory of change approach to plan urban education reform. *Journal of Educational & Psychological Consultation, 11*(1), 93-121.

Fritz, J. J., & Miller-Heyl, J. (1995). Fostering personal teaching efficacy through staff development and classroom activities. *Journal of Educational Research, 88*(4), 200.

Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*, 569-582.

Guskey, T. R. (1988). Teacher Efficacy, Self-Concept, and Attitudes toward the Implementation of Instructional Innovation. *Teaching and Teacher Education: An International Journal of Research and Studies, 4*(1), 63-69.

Guskey, T. R. (1997). Research needs to link professional development and student learning. *Journal of Staff Development, 18*(2).

Loucks-Horsley, S., Newlove, B. W., & Hall, G. E. (1975). *Measuring levels of use of the innovation: A manual for trainers, interviewers, and raters*. Austin, TX: University of Texas.

Morris, L., & Fitz-Gibbon, C. (1985). *How to measure program implementation.* Newberry Park, CA: Sage Publications, Inc.

Figure 1. Description of the Formative Evaluation Project and the Professional Development Program

The Student Centered Learning Project was designed to train and support urban elementary school teachers to provide instructional approaches and learning environments leading to increased student engagement and academic success. The current project focused on assisting teachers with creating a positive learning climate and with implementing effective literacy instruction for struggling readers. Originally designed as a professional development program for primary level elementary school teachers, the current program was conceptualized to extrapolate the key components of student-centered learning approaches for upper elementary school teachers. The program included monthly workshops along with follow-up individual coaching sessions provided by program staff.

This project was funded by local foundations that were interested in improving the learning outcomes of students in urban schools. These funding agencies requested that an evaluation component be included in order to evaluate the impact of the program on teachers and students. The project was funded as a two-year pilot program, during which time, the goal was to both develop an evaluation approach and provide professional development to at least twenty classroom teachers who were teaching in urban school settings. The formative evaluation project included monthly debriefs between an external program evaluator and program staff. These debriefs included program status reports, in-depth discussion of programmatic and evaluation issues, and co-development of evaluation instruments.

Table 1. Focus Questions for Each Stage of the Formative Evaluation Process

Stage 1: *What is the program vision and what are the resulting changes in practice?*	✓ What are the critical features of the professional development program? ✓ How will the program work with teacher participants? ✓ How will we know if the program is successful?
Stage 2: *Who are the teacher learners, and how are they responding to the professional development program?*	✓ What are important teacher characteristics (i.e., efficacy, age, educational background, prior experiences, teaching philosophy, etc.) that might influence implementation? ✓ What are important contextual factors (i.e., student demographics, teaching assignment, etc.) that might influence implementation? ✓ How will we know which teachers are implementing the instructional practices?
Stage 3: *What is the impact on teachers' students?*	✓ In what areas of academic development do we expect to see impacts on students? ✓ What are appropriate student measures? ✓ How can we be sure that the impact on students can be attributed to the professional development program?
Stage 4: *What changes need to be made to the professional development program?*	✓ What aspects of the program need to be changed, dropped, or refined?

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