# Lessons Learned in Conceptualizing Teaching Assistant Training Programs from their Evaluations

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### Abstract:

Given the significant resources institutions invest into training teaching assistants, there is often a desire to systematically understand the value of TA education programs. Conducting a program evaluation can be a powerful exercise that generates the formative learning that can lead to program improvement. However, such findings, by their very nature, may be generated too late in a program's implementation cycle to have any real, meaningful impact on program participants. Thinking evaluatively about a program early in its development may help maximize its potential and avoid common program design pitfalls. In this article, I reflect on my experiences evaluating educational programs in higher education and highlight a few powerful concepts and questions an evaluator would raise when evaluating TA training programs. I also illustrate how these concepts and questioning can be applied to program planning to maximize program potential.

## **Key Words:**

Program evaluation, TA training, SoTL, program planning, program design, graduate student development.

### Introduction

Given the importance of teaching assistants (TAs) to the delivery of contemporary higher education, institutions invest substantial resources into preparing TAs for their roles and responsibilities (e.g., Kreber, 2001; Luft, Kurdziel, Roehrig, & Turner, 2004; O'Neal, Wright, Cook, Perorazio, & Purkiss, 2007). Most institutions now have in place comprehensive TA training programs (e.g., Marbach-Ad, Schaefer, Kumi, Friedman, Thompson, & Doyle, 2012; Nyquist, Abbott, & Wulff, 1989; Park, 2004; Prieto, 2002). These programs typically begin with an orientation conference, lasting from one to three days, at the beginning of a school year. TAs are introduced to effective teaching and

learning practices as well as to institutional administrative procedures. Other sessions throughout the year may build upon this foundation and extend a TA's competencies to leading teaching and learning in the college classroom.

With significant resources being invested into these programs, an increasing focus of the teaching and learning field is to investigate the consequences and impact these programs have on the TAs themselves, the learners they teach, and the accruable benefits to the institution in a systematic and robust manner (e.g., Border & von Hoene, 2010). Evaluations of TA training programs can generate formative learning, which facilitates program improvement, or can provide summative judgments of program quality, which demonstrates program effectiveness and accountability to university administrators (Patton, 2008; Scriven, 1991).

As a program evaluator, I am often called upon to consult on evaluating TA training and other educational development programs in higher education. From these consultations, I find that a better understanding of these programs' effectiveness is achievable long before any data is collected for the evaluation. This understanding stems from a logical analysis of the program's design from an evaluator lens. Program evaluators' familiarity with program evaluation theory affords them not only a framework for measuring program outcomes (Patton, 1994) but also a specialist's perspective on conceptualizing a program and its effects. The evaluator perspective, as my clients and I soon discovered, can differ from that of a program manager or program administrator. In my view, this is because the reality of having to respond to the pressures of organizing and delivering a program—typically done under strained conditions with limited resources—often results in a program lacking in internal coherence. Engaging in an evaluation consultation process, alone, allows the program manager or program administrator the time and space to revisit the logical connections of their TA training programs in ways not possible when they are inundated with operation and administration. The formative learning generated as part of the process (Patton, 2008) can be triggered not only through working with an evaluator on an evaluation but also through asking similar questions during program planning and redevelopment.

In this article, I explore some of the concepts and questions an evaluator would raise when consulting on an evaluation and illustrate how they can be employed as heuristics for program planning and redevelopment. Whenever possible, I ground the discussion in program evaluation theory and in concrete examples. I do so with the hopes of informing others whose desire lies in designing strong TA training programs.

### "Do you have a program?"

A prerequisite to beginning any program evaluation is to ensure that a program is sufficiently developed for it to be evaluated. In the case of beginning programs, the program may not have developed sufficiently and is therefore not evaluable (Wholey, 1987); that is, program goals may not be fully articulated, program activities may not be standardized, and the effects of program activities on program participants may be unclear (Patton, 2008). One way of determining the "evaluability" (Wholey, 1987) of a program is to analyze it for its constitutive building blocks. An evaluable program consists, at a minimum, of:

- a set of planned systematic activities
- using managed resources
- to achieve specified goals
- related to specific needs
- of specific, identified, participating human individuals or groups
- in specific contexts
- resulting in documentable outputs, outcomes, and impacts
- following assumed (explicit or implicit) systems of beliefs...about how the program works
- with specific, investigable costs and benefits (Yarbrough, Shulha, Hopson, & Caruthers, 2011, p. xxiv).

Verifying the existence of these program components prior to evaluation ensures that a program has been sufficiently developed. There is little point in evaluating a program, for instance, if its program of activities has yet to be standardized. Moving forward in an evaluation under such circumstances would likely yield inconclusive results.

Raising the question—do you have a program?—for program planning can be a valuable exercise. This is because the same exercise can be used heuristically to afford the educational developer the opportunity to "build up" the program and ensure that critical program components are in place. For the purposes of program planning, it can be helpful to employ a simpler definition of a program. At the most basic level, any educational program is comprised of a sequence of planned *activities* intended to promote program *outcomes* (Fig. 1).

Activities are those undertakings organized by a program that are assumed to contribute to program outcomes. Activities for TA training programs may include seminars, lectures, or one-on-one consulting sessions. Educational developers must also consider supporting activities, like program advertisement, registration, and records keeping, for they are just as essential in promoting program outcomes. Program activities vary in their potency due to the inherent limitations associated with each format. For instance, while large-format lectures may be appropriate for disseminating knowledge and facts, they are less potent for engendering deep understandings; thus, few educators believe large-format lectures are a powerful way to develop interpersonal competencies.

Program outcomes describe those observable changes in knowledge, skills, attitudes, or behaviours expected of program participants. Program outcomes may also include institutional-level outcomes that can be accrued from program execution. Assessing the degree to which activities are aligned to program outcomes is an important first step in program planning and evaluation, specifically ensuring that each outcome is matched to at least one planned activity.

# Activities



# Outcomes

Figure 1. A program, at its simplest, is composed of a sequence of planned activities intended to promote program outcomes.

Engaging educational developers in analyzing their TA training programs typically reveals other issues. One concern is whether or not program delivery staff conceptualize the program similarly and, therefore, implement the program similarly. Then, educational developers may find themselves failing to reach a consensus about program goals or the intended outcomes of the program. Creating a shared understanding across all aspects of a program, whether in logic or delivery, is necessary for any attempts at evaluation and enhances program delivery. Should program planners find themselves questioning the extent to which a program is sufficiently developed, they should facilitate dialogue among all stakeholders (e.g., program developers, program instructors, program users, institution leaders) about the needs of the institution, what ought to be the program outcomes and program goals, and what might be effective program activities.

### What is programmatic about a TA training program?

Aside from ensuring that critical program components have been sufficiently developed, also study the intentionality behind program activities, specifically the sequencing of activities. Consider this: Is an intentional program of activities being offered?

For TA training programs, think about what foundational knowledge, concepts, or experiences must be in place for other concepts to build upon. For instance, is it important that TAs have some classroom exposure in working with students before they are introduced to enacting active learning? Also consider in what way the particular program addresses them. For instance, if it is important that TAs become competent in cross-cultural issues within the college classroom, might it be important that the TAs have mastered basic instructional techniques and can monitor learning as it happens within the classroom? The answer to these questions likely depends on the quality of TAs entering a particular TA training program. Hence, it would be difficult to offer a prescription, other than to suggest that these issues be given considerable thought by those responsible for TA training programs. Often, I find that TA training programs allow TAs significant freedom in signing up for just about any sessions. This approach risks neglecting the developmental trajectory that undergirds our conceptions of good learning. Mirroring sound learning practices in our TA training program seems commonsensical but in fact is incredibly challenging to enact in programs. A wellconstructed TA training program should ideally guide a TA in the sequence of learning achievable within the program.

### **Evaluation Concepts Useful for Designing TA Training Programs**

The substantive complexity associated with training TAs presents the educational developer with challenges beyond attending to a program's construction. This is because those responsible for designing TA training programs must accommodate for TAs' diverse backgrounds in terms of their prior teaching experience (e.g., Prieto & Altmaier, 1994), teaching proficiency in their own discipline, degree level (undergraduate/master's/doctoral), and cultural differences (local/international TA), to name a few. Not only are TAs diverse, *their* students are as well. For the purpose of planning, these uneven starting points suggest that a TA training program ought to be sufficiently complex in its offerings for it to be effective across such heterogeneous contexts. Adopting an evaluative lens would encourage program planners to consider two issues: (1) the complexity of intended program outcomes; and (2) dosage.

### **Complexity of Intended Program Outcomes**

Attending to the complexity of intended program outcomes invites a program planner to consider the acceptability of intended outcomes that are being targeted by a particular program. For any desired program outcome (say, to prepare a lesson plan in a manner respectful of diverse learners' needs), its expression can be mapped along two dimensions. The first dimension refers to the substantive nature of the outcome. What are the necessary knowledge, skills, attitudes, or behaviours associated with a desired program outcome? The second dimension refers to the acceptable level of performance. Representing this framework visually yields a table like Table 1.

		What are the dimensions of intended learning outcomes?			
		Knowledge	Skill s	Attitude s	Behaviour s
What is the acceptability of activities to evidence the intended outcomes?	Understanding and recall	(*)			
	Application to a provided case problem	(**)	(**)		
	Demonstration within a controlled setting (e.g., microteaching)				
	Initial attempt at applying new learning within an authentic setting				
	Proficient demonstration of new learning within an authentic setting	(***)	(***)		

Table 1. Program outcomes of TA training programs can be mapped along the dimensions of the substantive nature of these outcomes and the acceptable level of performance.

For instance, consider the task of preparing TAs in fair grading practices. What, if any, are the knowledge, skills, attitudes, or behaviours associated with fair grading

practices? And also, what level of performance would the program participant have to demonstrate in order to satisfy the task of preparing TAs for fair grading? Is it enough that TAs be able to (\*) (simply) understand and recall principles of fair grading practices? Or is it important that TAs (\*\*) be able to apply these principles (knowledge) into constructing a rubric (skill) with case scenarios to evidence their competence in fair grading practices? Or is it important that TAs be able to (\*\*\*) demonstrate proficiency in their own applications of assessment principles (knowledge) by constructing a rubric (skill) to evidence their competence in fair grading practices?

Conversations around the complexity of intended program outcomes can best be broached by raising the question: *is it enough that*? For instance, is it enough that the TAs be able to discuss some principles of effective teaching and learning, or should they be able to demonstrate application of effective teaching and learning principles within a controlled setting (e.g., micro-teaching sessions)? Alternatively, should TAs be able to demonstrate the application of effective teaching and learning principles within their own class? There is rarely a "right answer" to this issue; therefore, making a conscious attempt to consider it is the goal of engaging in this questioning.

### **Program Dosage**

Having considered the complexity of intended program outcomes, the next issue to ponder is the sufficiency of program activities toward promoting intended program outcomes, assuming that program activities are individually designed and implemented well in the first place. In my experience, educational developers may hold higher aspirations for their TA training program than their program has been constructed to provide. The evaluation concept at play is dosage (e.g., Donaldson, 2007). A program outcome low in its complexity will require a low dose, i.e., less powerful program activities. If it's sufficient that TAs be familiarized with the markers of a student in mental health distress, these aims can be satisfied by facilitating a didactic session on the topic. Contrast that example with a more complex program outcome. If it's necessary that TAs be able to respond to a student in distress and provide immediate peer-help, a program might involve more elaborate training techniques like role play and simulation. In other words, a program outcome high in complexity will require a high dose or a more powerful series of program activities. In the case of TA training programs, TAs are often expected to perform at a high level in their teaching and learning competencies, yet the program activities (in the form of discrete workshops) may be insufficient or too low of a dose to trigger the intended outcomes. This incongruence can be problematic when course instructors hold overly high expectations of what TA training can offer.

Another situation where the concept of program dosage becomes applicable is when a competency naturally decays but proficiency is nevertheless expected. Examples include critical, but infrequently used knowledge, skills, attitudes, or behaviours, such as mental health peer-helping skills or specific administrative policies around plagiarism. For these outcomes, the program ought to offer a strong initial dose to engender lasting changes in the TAs or provide maintenance activities to ensure that the TAs are ready and able to perform a task when needed.

### Conclusion

In the above paragraphs, I have highlighted only a few evaluation concepts and questions that can be useful for planning TA training programs. The first concept is drawn from evaluability assessment (Wholey, 1987), which seeks to determine whether or not a program is sufficiently developed for it to be evaluated. The same thinking taken to a planning context provides an entry into building up a robust TA training program by attending to, for instance, the program activities and the intended program outcomes as well as the alignment between the two. Next, I raised the importance of the proper sequencing of program activities. The challenge there is to build a learning sequence that is sufficiently differentiated but still broadly applicable to diverse learners. Finally, I introduced two concepts from the evaluation: complexity in program outcomes and dosage (e.g., Donaldson, 2007). These concepts provide a heuristic into thinking about the sufficiency and acceptability of a TA training program in triggering the intended program outcomes. In sum, while these concepts originated from the field of program evaluation, I hope to have shown how the application of these concepts to program planning can be fruitful.

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