Formative, Preformative, and Proformative Evaluation

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In this note, I would like to: (i) define more carefully the terms 'preformative' 'proformative' that I have used in print from time to time; (ii) consider whether preformative is a sufficiently important role for, or type of, evaluation that it may be worth considering alongside the triad of formative, summative, and ascriptive; (iii) stress that good formative evaluation typically needs to include both a holistic evaluation and an analytic evaluation of the evaluand, a dualism that I will refer to as 'the double-barreled nature of good formative evaluation; (iv) introduce proformative evaluation, of which whistleblowing is an example, to illustrate how one must sometimes cross the line between evaluation and implementation;' (v) comment about evaluation taxonomies in general.

Definition and Importance of 'Preformative Evaluation'

In previous uses of this term I have usually defined it contextually as 'evaluation of the design' (of a program or product, for example) But this is too limited. It should rather be said to refer to whatever evaluation, of any given kind of evaluand, that can be done before it exists. This is in fact one kind of proposal evaluation; that is, formative proposal evaluation. (Summative proposal evaluation is typically done in order to decide whether to fund or reject a proposal rather than improve it.) Since proposal evaluation has not, as far as I know, received much analytical

attention, it seems worth unpacking at least this sub-species of it here. The first and most important feature of it is that, perhaps surprisingly, it must include: (a) evaluating the (still hypothetical) evaluand as well as is possible, hence typically includes doing (estimated) cost analysis, process analysis, analysis generalizability and alternatives, and notably evaluation of any predictable long-term effects. It will, also or therefore, include: (b) evaluation of the design itself for clarity, adequacy of detail, and the associated materials/contractor lists; (c) notably, evaluation of the project's estimated costfeasibility: (d) the first of three components of preformative evaluation that do not appear to be of proposal evaluation as normally understood—evaluation of its precursor effects; that is, any effects that may result from its probable, or even merely proposed, existence (e.g., the huge effects on real estate prices, hotel bookings, retail orders, bank loans, and so forth, that occur when it is announced that a future summer or winter Olympic Games will occur in a particular venue-and the effects on the training and selection of athletes contending for inclusion in their country's team); (e) evaluation of its effect nominated designers/constructors/suppliers/evaluators and their staffs, prior to the commencement of construction. These could be considered just precursor effects, but may be worth a special mention because the evaluand's overwhelming importance to these impactees creates great stress and a significant risk of corruption (by and of them). (f) We must also include evaluability assessment as an important element of preformative evaluation. And of course we must looks for the ripple effects of a-f.

¹ For example, in several years' editions of the *Key Evaluation Checklist* (at *michaelscriven.info*).

I have become increasingly aware of the importance of preformative evaluation through consideration and execution of evaluations in two particular situations. One is the evaluation of major software and hardware innovations (e.g., Windows 8, the iPad, 3D TV), where any historian of, or expert commentator on technology can. albeit with a high degree of risk, assess the quality or value or importance of these entities before they exist. The other is the evaluation of proposed interventions in the field of international aid. These evaluations can and should cover the precursor effects of the predicted evaluand and can, if the evaluator has access to the designs, also evaluate these long in advance of their instantiation.

The importance of preformative evaluations and the ability to do them is by no means restricted to the essentially reactive techno-geek population (in the tech example): legislators. investors, city planners, and police forces need to do preformative evaluation in order to improve the evaluand's details and results (possibly even its occurrence), for example, by redesigning traffic patterns, timetables, and crowd control systems. (I use the term "anticipators" for people who act on the basis of a preformative evaluation.) This is exactly the proactive raison d'être of all formative evaluation, and one could just add a wider time window to the coverage of the term 'formative evaluation' and continue to use that term. But it may seem ontologically a little bizarre to talk of formative evaluation of something that doesn't yet and may never exist, so I think in some contexts it's worth adding an extra category to the taxonomy of major types of evaluation. And 'preformative' fits well into the explanatory sentence we use for the others: "The purpose of type X evaluation is to do Y", as in:

- The purpose of *formative* evaluation is to *improve the merit, worth, or significance of the evaluand.*
- The purpose of *summative* evaluation is to *provide* a basis for dispositional decisions about the evaluand.
- The purpose of ascriptive evaluation is to add evaluative information to our body of knowledge about the evaluand.
- The purpose of preformative evaluation is to improve the merit, worth, or significance of a possible evaluand.

Note that it is probably better to refer to the evaluand in preformative as *virtual* (or *possible* or

potential) rather than *future*, because it's important to cover the case where a number of alternative possibilities are being considered for implementation, with the intention of selecting the best one (or more), not all of them.

A possible alternative way of handling the taxonomical problem would be, in the interests of compromise, to incorporate preformative as a option;' that 'slash is, talk about formative/preformative (or pre/formative or (pre)formative) rather than simply formative. But this surely concedes too much of the autonomy of preformative; after all, major components of that task are evaluating the feasibility of the entire evaluand, and the problems of handling precursor effects, neither of which is a problem for the usual formative evaluation, which is of programs (or products, for example) that already exist.

Three points to be stressed overall are to be sure to include some consideration of the preformative role in (i) *doing* serious program evaluation, and in (ii) *talking about* important roles for evaluation, since—whether or not the evaluation is done in advance of the evaluand's creation—serious program evaluation of evaluands that cast large shadows before them should include serious attention to the shadows. It follows from these two points that: (iii) preformative evaluation provides an extra string to the argument that evaluation should be written into program plans and begun before the program begins, so that the benefits of preformative evaluation can be materialized.

Definition and Importance of 'Proformative Evaluation'

The term 'proformative' is a hybrid of 'proactive' and 'formative.' It refers to evaluation that not only identifies strengths and weaknesses of an evaluand at a time and for a client or other stakeholder that can improve the evaluand by taking these into account (i.e., formative evaluation), but an evaluation where the evaluator actually implements—or acts so as to directly bring about-the recommended changes, without operating through a client (i.e., being proactive about the evaluand rather than merely reactive to Such cases are not common, it). whistleblowers provide some very important examples: for instance, Dr. Kelsev in the thalidomide whistle-blowing case. In what we might call duty-driven cases of proformative, the evaluator is the only person who can make the changes (either because normal channels fail, or the time window is too tight) in time to avoid 60 Scriven

major losses of life or quality of life. Aircraft cockpit recorder data includes some well-known cases where the co-pilot correctly diagnoses a fault and avoids a crash by acting when the pilot refuses to act or is incapacitated.

Some evaluators have also argued that a much wider range of cases should be included in the category of proformative evaluations, where there is no duty to act but *advocacy* is allowable or desirable when an evaluation (formative *or* summative) indicates a need for it. However, the case for restricting proactivity to the status of last resort seems to me quite strong, in order to avoid any suggestion that advocacy can be bought with an evaluation contract.

General Thoughts about Evaluation Taxonomies

The taxons we are discussing here are essentially purposes for doing—or functions of, or roles for—evaluation. Thinking about other proposed additions to, or changes in the common triadic division of evaluation types, I am not persuaded by the case for adding 'developmental evaluation' as a new category, since it seems to me to be just an intelligent use of repeated formative, which of course requires the cooperation of the evaluee; and there is the pervasive problem of co-authorship bias (or 'rejected suitor' bias).

I'm a little more attracted by recognizing that 'evaluation for accountability' is somewhat different from the usual kind of summative, but it seems to me not enough to call it a different type, since it seems reasonable to say that deciding whether the resources required for a program (or policy, for example) have been used well rather than badly, in a legal or auditing context, is essentially asking whether the dispositional decision of record about the evaluand was justified.

There is another, more frequently used, taxonomy of evaluation types: it classifies them by the *type of evaluand* involved; for example, program, product, personnel, and so forth.² One of these 15 or so categories comes closest to covering preformative evaluation: it is proposal evaluation. The two are not just the same, however, for the

reasons given above; so preformative has to be treated as a type of evaluation that isn't quite covered by any of these evaluand categories.

The Double-Barreled Nature of Good Formative Evaluation

Talking to a meeting about faculty evaluation in South America recently, I was impressed by what seemed to me a cultural difference from North American practice. It seemed to me, though I may have been mistaken, that there was considerably more willingness to do analytic formative evaluation than holistic formative evaluation. This made me think hard about why I believe it's very important to do both, and why one might be less willing to do one rather than the other.

In the terminology I use, there are two subspecies of analytic evaluation: dimensional and component. Dimensions are aspects, components are space-time circumscribed elements. In evaluating teaching, for example, dimensional evaluations would be about strengths and weaknesses with respect to content versus pedagogy versus style; component evaluation would be about lecturing versus questioning versus test construction versus homework assignments versus grading practices versus classroom control. Evaluative feedback about either of these, preferably both, would be helpful to an evaluee in terms of locating where their efforts at improvement should be directed.

Holistic evaluation can also be divided into two major types—grading and ranking. Grading would involve saying something about the overall (a.k.a. 'absolute') level of achievement in a vocabulary that includes such terminology as: outstanding, competent, borderline adequate for promotion or tenure, unacceptably low. In ranking, the vocabulary would be comparative (i.e., relative to some contextually understood group of evaluees; e.g., candidates for promotion or tenure), and would involve terminology such as: better (or worse) than most, amongst the very best (or worst), average. In general, the first of these (grading) would be more useful, but in special situations, for example, where a reduction in staff is pending, the latter would be more valuable for time management decisions by the evaluee. In general, providing both of all these options would be more helpful, and would usually not involve massive extra cost.

² The list of principal evaluand types that I currently use is: program, product, personnel, policy, performance, proposal, portfolio, process (including practice or procedure), or phenomenon (e.g., diffraction, disaster, PTSD, epiphany, eclipse, (fiscal) depression); argument, action, attitude; explanation, evaluation, information.

Possible Causes of Reluctance to do Holistic Personnel Evaluations

Why might people find it easier to do analytic rather than holistic faculty evaluation? I think there are two elements in explaining this. First, it originates in the common problem of valuephobia³ and the fact that someone who can't handle, let alone encourage, criticism of themselves or their work tends, through empathy or fear of consequences, to want to avoid inflicting it on others. Second, even slightly negative holistic evaluation comes closer to being a criticism of the evaluee as a person than analytic does, because it's about the totality of the person's nature or performance in some role, and there's no mitigating offset of some positive comment, as can always be found with analytic evaluation. I think that the best approach to changing this situation is better education about the essential role of getting and giving evaluation as a key to selfimprovement, and hence as an important element in professionalism.

Think I've got this wrong or missed a key point? I am sure that it does need improvement, so please tell me what you think (mjscriv1@gmail.com), or submit some comments to this section of the *Journal of MultiDisciplinary Evaluation*.

³ Excessive fear of the prospect or receipt of critical evaluation, often due to a lack of adequate self-confidence or immaturity.