

Evaluating Academy Impact

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Meeting

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Overview

It is never too soon (or too late) to evaluate the impact of your Academy (or “Academy-like”) organization. Whether you wish to do an informal, internally-focused evaluation or a more formal, publishable study, following some basic guidelines will maximize the efficiency of your approach and the quality and validity of your findings.

If you are just starting out as a new Academy or Academy-in-development, you may want to conduct a *needs assessment* to help you shape your mission, define the needs of your target audience(s), and assess the resources available to meet your goals. For Academies that have been in existence for a few years, or for those aiming to reinvigorate member engagement, a *process-oriented assessment* may help you discern whether you are meeting your goals or need to consider some course corrections. Academies and related organizations that are well-established may want to assess *both* short-term and long-term outcomes. For each type of evaluation, identifying *stakeholders* is a key first step (see exercise below).

There are different frameworks used in evaluation research: *logic models*,¹ *context-input-process-product (CIPP) models*,² and the *before-during-after model*³ are among the more frequently used approaches. In general, these approaches seek to measure *value, change over time, cost-benefit ratios, and positive (and unintended negative) impacts* on faculty and trainees. See *Program Evaluation Models and Related Theories: AMEE Guide No. 67 (2012)*⁴ for a comparison of different approaches to determine what fits best with your program and evaluation resources.

You can also refer to our academies collaborative website to see a more comprehensive presentation on evaluation approaches called *Charting our progress: Evaluating Academy impact (Sullivan, 2015)* at <http://www.academiescollaborative.com/annual-meeting.html>.

1. Identify Stakeholders

Stakeholders are the primary audience for your evaluation results, and they should be included in the planning, implementation, and evaluation of your program. Typically, your stakeholders will be the direct beneficiaries of your program, such as faculty, as well as those in administrative or oversight roles, such as those in the role of dean, provost, or program directors or board of directors. Other stakeholders may be less immediately beneficiaries of the program such as students, residents, and patients. External groups such as the LCME, ACGME, and other licensing or accreditation organizations may also be important stakeholders, particularly when teaching quality is part of their review.

In his 2010 article “Twelve tips for evaluating educational programs,”⁵ David Cook provides two important questions in identifying stakeholders and choosing appropriate outcomes: **Whose opinion matters? & What would be most meaningful to them?**

Key Points

IDENTIFY STAKEHOLDERS. *Stakeholders* are those who potentially benefit from your program (e.g., faculty, students, and residents) as well as those who oversee its policies, budget, and administration. Be sure to include **all** stakeholders in your evaluation and include measures that are meaningful to each group.

DO YOUR HOMEWORK. Be sure to review the literature to see examples of evaluation studies to help you design your study and identify process and outcome variables. Don't limit yourself to the PubMed database: draw on psychology (PSYCINFO), education (ERIC), and other literatures as well. The American Evaluation Association and numerous journals in the field of evaluation can also provide important perspectives for your work.

MIXED METHODS approaches are optimal to obtain valid results. Consider combining focus groups and interviews with surveys to maximize the depth and breadth of your study findings.

USE THEORY TO INFORM YOUR STUDY. Think about using behavior change theories or s can be confusing for many medical educators because theories can be drawn from cognitive, organizational, and educational theoretical frameworks. Having a theory, however, will help you to identify

USE PRIMARY & SECONDARY DATA SOURCES. In addition to primary data collection such as surveys and focus groups, explore what existing data exist to inform your study. Course evaluations, promotion & retention data, and teaching awards or research publications can provide valuable information about program impact.

Exercise #1

Using the table below, generate a list of the **top four potential stakeholder groups** for your respective programs (these can be unique to your program or you may all have these in common), their **key interests**, and **potential measures**:

Stakeholder group	What outcomes would be most meaningful to them?	How might you measure this? (e.g., survey, interview, focus group, existing data)

2. Link Outcomes to Mission

Program evaluation outcomes should clearly align with the specific program mission and objectives, such as enhancing faculty teaching skills, supporting faculty career development, and increasing scholarship in medical education. And avoid the pitfall of only measuring satisfaction!! See, for example, the four levels of the Kirkpatrick model⁶: *reaction* (e.g., satisfaction), *learning* (e.g., change in knowledge), *behavior* (e.g., change in faculty teaching practices), and *results* (e.g., increase in scholarship, or improved faculty evaluations). Consider measures such as teaching competency, culture for teaching, learning environment, and sense of community among educators.

Although we don't have time to work on this today, do be sure to identify important participant characteristics to measure (e.g., junior or senior faculty, course or clerkship faculty, gender, race/ethnicity, teaching experience or expertise) so you can explore how outcomes might vary for these different groups.

Exercise #2

What are **three of the primary goals** of your organization? How might your outcomes link to these goals? (Note: If you don't know your group's mission or do not have goals developed yet, write down your best guess about the main goals for your program.)

Program goals/mission	What outcomes would best measure these goals?	How might you measure these?

3. Take-Home Plans

Please write down your answers to the following questions.

a. What is the most important variable you would like to measure at your institution?

b. If you only had limited resources to evaluate your program, what would be the easiest variable for you to measure?

c. If it is helpful to you, please make take a moment to plan to take one step to evaluate your program (or planned program) at your home institution. We invite you to share your plan and progress on our website *discussion board* page to encourage and inspire your Academies Collaborative colleagues!

References

1. Logic models: <http://www.smartgivers.org/uploads/logicmodelguidepdf.pdf>
2. CIPP models: <http://files.eric.ed.gov/fulltext/EJ957107.pdf>
3. Before-during-after model:
4. Frye A and Hemmer P. Program evaluation models and related theories: AMEE Guide No. 67 Medical Teacher Vol. 34 , Iss. 5,2012
5. Cook, D. a, 2010. Twelve tips for evaluating educational programs. Medical teacher, 32(4), p.296-301.
6. Kirkpatrick DL. Evaluating training programs: The four levels. 2nd ed. San Francisco (CA): Berrett-Koehler Publishers; 1998.

Other Resources

Qualitative research guides:

- 1 Kuper, A., Lingard, L., & Levinson, W. (2008). Critically appraising qualitative research. British Medical Journal (BMJ), 337, a1035.
- 2 NIH Office of Behavioral and Social Science Research e-source book. <http://www.esourceresearch.org/DefaultPermissions/eSourceBook/tabid/226/Default.aspx>
- 3 Pope, C., & Mays, N. (Eds.). (2006). Qualitative research in health care (3rd ed.). Oxford: Blackwell Publishing.
- 4 Pope, C., Ziebland, S., & Mays, N. (2000). Qualitative research in health care. Analysing qualitative data. British Medical Journal (BMJ), 320(7227), 114-116.

Recent article describing a program evaluation:

Jordan J, Yarris LM, Santen SA, Guth TA, Rougas S, Runde DP, Coates WC. Creating a Cadre of Fellowship-Trained Medical Educators, Part II: A Formal Needs Assessment to Structure Postgraduate Fellowships in Medical Education Scholarship and Leadership. Acad Med. 2016 Nov 1. [Epub ahead of print]

Some Useful Links:

- These are two helpful guides for conducting focus groups (Focus Group Toolkit) and conducting qualitative and quantitative research (Information Gathering Toolkit) from the OMNI Research Group (omni.org), a social science research organization:

<http://www.omni.org/Media/Default/Documents/Information%20Gathering%20Toolkit.pdf>

<http://pages.stolaf.edu/2014psych-230/files/2013/08/focusgrouptoolkit.pdf>

- Recommended qualitative analysis software: dedoose.com;
- Recommended survey software: qualtrics.com

Links for information about conducting evaluation research:

- American Evaluation Association: <http://www.eval.org/>
- American Educational Research Association: <http://www.aera.net/>
- Social Science Research Methods: <http://www.socialresearchmethods.net/>
- Best Evidence in Medical Education: <http://www2.warwick.ac.uk/fac/med/beme/>