

# How to Build It So They'll Come: Faculty Opinion on Faculty Development

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## ABSTRACT

**BACKGROUND:** Residents report low satisfaction with faculty evaluation and feedback. To improve skills, successful faculty development interventions must be accessible and acceptable.

**METHODS:** A faculty development survey was administered to 145 specialty and non-specialty Internal Medicine faculty at the Warren Alpert Medical School of Brown University, Providence, RI. Analyses assessed demographics, opinion regarding evaluation and feedback and interest in faculty development.

**RESULTS:** Only 70% of faculty were satisfied with their evaluation ability and only 59% were satisfied with their feedback skills. Despite this, 32% had limited interest in faculty development. Non-specialty faculty were more interested than subspecialty faculty,  $p$ -value=0.02. Faculty preferred short electronic audio slideshows and 38% reported participation barriers.

**CONCLUSIONS:** Although faculty report evaluation and feedback are important skills, not all were satisfied with their abilities. Subspecialty faculty were less interested than non-specialty in faculty development. Our findings suggest that more effective ways to engage faculty in the process of faculty development are needed.

**KEYWORDS:** post-graduate, evaluation, feedback, medical education research

## INTRODUCTION

Graduate Medical Education (GME) programs rely on faculty to mentor, teach, supervise, evaluate, and guide trainees in their progression from students to independent practitioners. Regular feedback tied to evaluation of educational goals is essential to promote trainee success. Nevertheless, learners report receiving inadequate evaluation and feedback. The annual Accreditation Council for Graduate Medical Education (ACGME) Resident Survey consistently demonstrates low resident satisfaction with feedback after assignments.<sup>1</sup> Trainees across all levels of medical education frequently identify feedback from faculty as inadequate, and they typically desire more feedback than they receive.<sup>2</sup> Furthermore, faculty cite multiple challenges to providing high-quality

feedback, including lack of time, lack of recognition and reward for teaching, inadequate opportunity for direct observation, suboptimal learner insight, and discomfort with providing constructive criticism to residents.<sup>3,4</sup> A separate survey of 478 medical educators from 110 teaching hospitals and community practices found high rates of self-reported lack of training in teaching skills, providing feedback, assessment, and mentoring.<sup>5</sup> The need for skill development in the delivery of feedback has been identified in prior needs assessment studies.<sup>6</sup>

To be successful, faculty development must meet the perceived needs of the faculty and respond to faculty sources of motivation. Programs that conduct and respond to a needs assessment of the faculty will be more likely to succeed.<sup>7</sup> There is no one size fits all.

To address trainee dissatisfaction with feedback and improve faculty skills through targeted faculty development, we assessed our faculty's participation in teaching activities, comfort with evaluating and providing feedback to learners, desire for faculty development activities in evaluating and providing feedback to residents, and preference for the mode of faculty development delivery. In addition, we assessed whether faculty characteristics were related to perceived faculty development needs and desire for development activities.

## METHODS

### Study Design

A web-based survey tool which allows for the anonymous collection of data, REDCap, was used to assess faculty development needs and desires. The survey was developed by a focus group at the Warren Alpert Medical School of Brown University consisting of three internal medicine faculty and a biostatistician.

The survey was given to faculty who were identified through our evaluation system (e-value). Prior to the dissemination of the survey to faculty, it was reviewed and approved by the Institutional Review Board (IRB) at Rhode Island Hospital.

### Participant selection

Internal Medicine teaching faculty from three institutions at the Warren Alpert Medical School of Brown University

were surveyed via REDCap between January 29 and April 13, 2018. Two hundred and fifty-one faculty in the internal medicine training program responsible for teaching residents and completing evaluations during the 2018 academic year were included. Incomplete responses were excluded.

### Survey instrument, administration, and data collection

The survey consisted of 15 multiple choice questions. We assessed the participants' demographics, including gender, years in practice, subspecialty or non-specialty, and teaching setting. Respondents were categorized into two groups based on their divisions: subspecialty (cardiology, endocrinology, gastroenterology, hematology/oncology, nephrology, infectious diseases, pulmonary critical care, and rheumatology) or non-specialty (primary care, general internal medicine, geriatrics, palliative care, and hospital medicine). Years of experience were categorized into 4 groups: 1 to 5, 6–10, 11–20, and  $\geq 21$  years.

Faculty were asked about interest in and barriers to participating in faculty development sessions targeted to evaluation and feedback, their satisfaction with their ability to evaluate and provide feedback, willingness to be observed and provided feedback about their skills, and what types of faculty development activities they desired.

The number of learners taught by each faculty member were grouped into 1–5 and 6–10 learners. Weekly teaching hours by the faculty was classified as 1 to 5, 6 to 10, and more than 10 hours per week. Participants were asked to rate on a 1 to 5 Likert scale the extent to which they agreed with several statements about feedback to learners. Responses were coded as "Agree" if they responded "Agree" or "Strongly agree," all other responses were coded as "Disagree." Faculty were asked to give their preferred methods for faculty development from a list of choices, which included teaching tweets, half-day workshops outside of work week, half-day workshops during work week, webinars, ongoing longitudinal series, online self-directed modules, and short electronic audio slide shows.

### Analysis

Analyses were performed using SAS<sup>1</sup> software Version 9.3 of the SAS System for Windows, copyright © 2019 SAS Institute Inc. Chi-square and Fisher exact tests were performed to describe demographics, current participation in teaching activities, opinions regarding evaluation and feedback of learners, and desire for faculty development in the evaluation and feedback of residents and to compare subspecialty and non-specialty groups on these variables.

## RESULTS

One hundred and forty-five of the 251 teaching faculty completed the survey with a 58% response rate. More respondents were male (59%) than female, and the majority taught

**Table 1.** Demographics of respondents

	n (%)
Gender	
Female	52 (40.0)
Male	76 (58.5)
Prefer not to answer	2 (1.5)
Specialty division	83 (63.4)
Years after completing training in the area of practice	
1–5 years ago	29 (25.7)
6–10 years ago	18 (15.9)
11–20 years ago	34 (30.1)
21–6 years ago	32 (28.3)
Number of learners taught	
1–5 learners	109 (85.2)
6–10 learners	19 (14.8)
Weekly hours of teaching	
1 to 5 hours per week	58 (44.6)
6 to 10 hours per week	26 (20.0)
More than 10 hours per week	46 (35.4)
Teaching setting	
Inpatient	31 (24.0)
Outpatient	17 (13.2)
Both inpatient and outpatient	81 (62.8)

**Table 2.** Respondent Survey Responses

	n (%)
Interested in being observed while teaching and receiving feedback	
Yes	58 (44.6)
No	32 (24.6)
Not sure	40 (30.8)
Interested in faculty development sessions designed to improve your ability to evaluate and give feedback to residents	
Yes	89 (67.9)
No	16 (12.2)
Not sure	26 (19.9)
There are barriers perceiving to participating in faculty development sessions	46 (35.7)
Type of barriers perceiving to participating in faculty development sessions	
Time	125 (95.4)
Travel	2 (1.5)
Other	4 (3.1)
Faculty development activities have participated in during the last 2 years	
None	47 (39.8)
1–3	44 (37.3)
4–5	9 (7.6)
More than 5	13 (11.0)
Don't know	5 (4.2)
Evaluating and giving feedback to learners is an important part as an educator	126 (98.4)
Satisfied with the ability to evaluate the performance of the resident	91 (70.0)
Satisfied with the ability to provide effective feedback to the residents	77 (59.2)

in both the inpatient and outpatient setting (63%). A majority of respondents were subspecialty faculty (63%). Forty-five percent taught less than 5 hours per week and 35% more than 10 hours per week. Fifty-nine percent completed training in their area of practice more than 10 years ago (Table 1).

An overwhelming majority (98%) of those surveyed felt that evaluating and providing feedback was an important part of their job, yet 30% of faculty were not satisfied with their ability to evaluate residents and 41% were not satisfied with their ability to provide feedback (Table 2). Gender, time from training, or whether subspecialty or non-specialty physician did not affect satisfaction with evaluation skills.

Forty percent had not attended any faculty development sessions in the last two years and 37% had attended 1–3 sessions. Among those dissatisfied with their ability to evaluate resident performance or provide feedback, 26% and 37%, respectively, didn't attend any faculty development activities during the last two years. Most reported that time was the greatest barrier to participating in faculty development, with a small percent citing the need to travel as a deterrent (Table 2).

Significantly more male than female faculty were not interested in faculty development to improve their ability to evaluate and provide feedback (42% vs. 15%,  $p$ -value=0.0008). Subspecialty faculty reported less interest in faculty development, when compared with non-specialty, (61% vs. 79%,  $p$ -value=0.02). While not statistically significant, faculty more than 21 years from training reported less interest (56%) in faculty development, when compared with 79% in 1–5, 67% in 6–10, 68% in 11–20 years ago, with  $p$ -value=0.09.

Choice of faculty development activities in desired order was electronic audio slide shows (46%), online self-directed modules (45%), ongoing longitudinal series (34%), webinars (31%), half day workshop during work week (29%), half day workshop outside of work week (14%) and teaching tweets (11%). There were no significant differences in the choice of faculty development by gender, specialty, or time from completion of training.

Significantly fewer subspecialty faculty compared with non-specialty faculty were interested in being observed and provided with feedback on their skills (41% vs. 50%,  $p$ -value=0.013). Interest in being observed was not influenced by gender or time from completion of training.

## DISCUSSION

To provide learners with important formative feedback to succeed and professionally develop, faculty must be skilled in evaluation and feedback. While faculty agree that providing feedback is an important part of their role as educators, we found that 30% of our faculty were dissatisfied with their ability to evaluate residents and 41% were dissatisfied with their ability to provide feedback. Satisfaction rate was not affected by gender, time from training, or whether the

physician was a subspecialist or non-specialist.

Male faculty and subspecialty faculty reported less interest in participating in faculty development. This is particularly notable because the majority of teachers are male and specialty-identified. Further investigation as to why these differences exist might provide insight regarding ways to increase interest, particularly since these subsets represent the majority of teaching faculty at many institutions.<sup>8</sup>

Time was the most commonly endorsed barrier to participation. Fewer than half of our faculty, despite their dissatisfaction with their ability to assess and provide feedback, had attended any faculty development sessions in the last two years. Given limited non-clinical time, it is not surprising that faculty want efficient faculty development sessions. To meet this need, innovative methods for faculty development that allow asynchronous learning at a time convenient to the faculty member should be considered. Future studies ought to be performed to determine the effectiveness of these methods. Being observed and receiving feedback is an effective technique to improve skills and is a requirement for trainees in competency-based medical education. The value of direct observation should not just be limited to trainees. Direct observation of faculty members can improve their teaching skills.<sup>9</sup> Nevertheless, interest in being observed was not universal. Generalist faculty were significantly more interested than subspecialty faculty. A focus on the formative and context-specific nature of the activity might increase interest. Further examining the differences between the subspecialty and non-specialty faculty might be important in future studies since program directors need to ensure that all faculty members have the desire and the skills to evaluate and give feedback to trainees.

Faculty development programs targeted towards improving these skills have the potential to combat faculty dissatisfaction and improve resident satisfaction with the feedback they receive, as well as to improve the training received by residents. For faculty development to be successful, faculty must want to participate, have the time to participate, and receive effective training. Creating faculty development that is effective and acceptable to most faculty should be the aim of graduate medical education programs.

Although this study was limited to a single institution and a single specialty, dissatisfaction with feedback is a pervasive issue in medical education. The respondents represented male and female, as well as subspecialty and generalist, faculty with a varied amount of teaching experience, characteristics similar to faculty at many teaching institutions. Although our response rate should be noted as a limitation, there was a wide representation of faculty in terms of time from completion of training, number of learners taught, hours of weekly teaching, and setting for teaching activities. Assessing the needs of diverse faculty may allow for the development of programs that will appeal to the mix of faculty found at most institutions.

## CONCLUSION

Our findings suggest that while faculty take their educational roles seriously, not all faculty are confident in their abilities to evaluate and give feedback to learners, and many were not interested in improving their skills through direct observation and evaluation. We need to create effective ways to engage faculty in the process of improving their skills and to overcome barriers to participation in faculty development.

Since this study was performed, three, short electronic audio slide shows titled Faculty Five in Five, which focus on evaluation and feedback skills, have been disseminated to teaching faculty in the Department of Medicine at the Warren Alpert Medical School of Brown University.

## References

1. Accreditation Council for Graduate Medical Education (ACGME), ACGME Data Collection System: Resident and fellow survey. <http://www.acgme.org/acgmeweb/DataCollectionSystems/ResidentFellowSurvey.aspx>. Accessed: 2018
2. Bing-You R, Hayes V, Varaklis K, Trowbridge R, et al. (2017) Feedback for Learners in Medical Education: What Is Known? A Scoping Review', *Acad Med.* 2017; 92(9): 1346-1354.
3. Steinert Y, Macdonald ME, Boillat M, Elizov M, et al. Faculty development: if you build it, they will come. *Med. Educ* 2010; 44(9): 900-907.
4. Kogen J, Conforti L, Bernabeo E, Durning S, et al. Faculty staff perceptions of feedback to residents after direct observation of clinical skills. *Med. Educ.* 2012; 46(2): 201-215.
5. Houston TK, Ferenchick GS, Clark JM, Bowen J, et al. Faculty development needs. *J Gen Intern Med.* 2004; 19(4): 375-379.
6. Leslie K, Baker L, Egan-Lee E, Esdaile M, et al. Advancing faculty development in medical education: A systematic review. *Acad Med.* 2013; 88(7):1038-1045.
7. Sevkat BO, Dilek A, Nalan SH, Iskender S. A Faculty Development Program Evaluation: From Needs Assessment to Long-Term Effects, of the Teaching Skills Improvement Program. *Teach Learn Med.* 2010; 16(4): 368-375.
8. Association of American Medical Colleges, (AAMC) Faculty Roster, December 31, 2019 snapshot, as of December 31, 2019 655 K Street, NW, Suite 100 Washington, DC, 20001-2399
9. Regan-Smith M, Hirschmann K, Iobst W. Direct Observation of Faculty with Feedback: An Effective Means of Improving Patient-Centered and Learner-Centered Teaching Skills. *Teach and Learn Med.* 2007; 19(3): 278-286.

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