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Invited Commentary

Learning from our struggles as faculty educators

Over the last decade, surgical educators have rightfully renewed focus on systematic assessment of surgical residents; ranging from how they study[1] to how they perform technically in the operating room.[2] Undoubtedly, resident performance is influenced by a faculty surgeon's teaching effectiveness; yet rarely do faculty receive important insight into their performance as educators. How can faculty improve without assessment and feedback? As we strive to consistently and frequently provide feedback to residents, it is equally imperative that faculty are also provided a strong educational framework by which to analyze and improve teaching effectiveness.

Many medical educators know a colleague who consistently wins teaching awards; but what qualities do these effective teachers embody? Not surprisingly, learners appreciate attending surgeons who are clear communicators and who facilitate psychological safety in the operating room.[3] Unfortunately, our self-perception of effective intraoperative teaching may fall short of our learners' assessment.[4] Such a disconnect suggests that faculty are probably not receiving helpful formative feedback.

Our journey as clinical teachers is not nearly as refined or well paved as surgery residency. While faculty may possess superb proficiency in technical skills, it is less known how their ability to transfer such knowledge affects the training outcomes of our learners. Although most training programs in the country espouse the tripartite mission of clinical care, research, and education, formal development of educators can be lacking.[5] Thus, we oftentimes lack fundamental know-how and most faculty are initially appointed "professor" by virtue of one's academic affiliation and clinical experience.

Ask faculty around the country and many will share the sentiment that assessment and feedback are vital to faculty development, but the daunting task of regular feedback serves as a major obstacle. This is why I believe this study by Torbeck and Dunnington is an important and herculean undertaking.[6] In this study spanning 3 years, authors developed a theory-based review and coaching process to provide crucial formative feedback to faculty within their Department of Surgery. Torbeck also created, out of necessity, an "intraoperative teaching assessment form" which analyzes teaching effectiveness as recognizable behaviors throughout different phases of an operation. Surgeons benefited from this formal, expert assessment which garnered departmental leadership support. My initial instinct was to assume that surgery faculty would not happily participate in such a time-consuming process, yet the authors proved me wrong and demonstrated that not only did they find the coaching valuable, but that they utilized these assessments in their promotion and tenure process.

The most intriguing concept in this pilot study was the inclusion of faculty self-reflection. Faculty were not only asked to self-assess on effective components of their intraoperative teaching, but more importantly they reflected on areas where they struggled. And the responses were fascinating. For example, many respondents noted difficulty relinquishing control of the operation and affording resident autonomy. Not surprisingly, several respondents struggled with competing interests between education and clinical productivity. I am pleasantly surprised by their candor and self-awareness.

The authors should be congratulated for taking on such a labor-intensive program, but ironically the labor-intensive nature of this program may also be its biggest barrier to broad adoption. Case in point, the authors completed 39 intraoperative assessments over a 3-year period suggesting that this process takes phenomenal human resources and buy-in from faculty and leadership alike. Not only did Torbeck present feedback, the authors also provided expert coaching to surgeons – a novel implementation in teaching effectiveness. In the future, I think education researchers must begin to address and incorporate implementation science for the myriad curricula and programs developed; ultimately the sustainability of education efforts, particularly in areas of feedback and coaching, are ineffective unless consistently applied.

Providing feedback may not be enough; affecting behavioral change to improve teaching effectiveness should be the ultimate goal. An interesting systematic review of resident feedback demonstrated that very few studies actually evaluate outcomes of education intervention.[7] Although the authors elude to intermittent follow up with participants, it would be immensely helpful to systematically follow the progress of this study's participants and analyze their growth as intraoperative teachers.

The authors clearly recognized the importance of evaluation and feedback in faculty development and their study illustrated that teaching is as much science as art. This study brings up a necessary call for outcomes-based education research to address some additional questions that may be important facets of faculty development. For example, is it possible to create a safe environment where residents can provide timely, end-of-operation feedback to the attending for intraoperative teaching, without fear of retribution? And does such feedback translate to improvement in intraoperative teaching effectiveness and ultimately better training for our learners?

Lastly, participants in this study ought to be congratulated as well. Perhaps by embracing assessment of our competence as intraoperative teachers, we as faculty will be reminded of the vulnerability of receiving honest feedback. By reflecting on our own struggles as educators, hopefully we start to recognize how fostering psychological safety and creating a positive learning climate are paramount to improving our trainees' outcomes as surgeons.

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