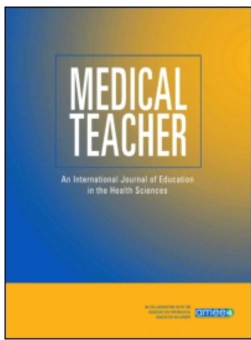

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TWELVE TIPS

Twelve tips to promote a feedback culture with a growth mind-set: Swinging the feedback pendulum from recipes to relationships

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ABSTRACT
Feedback in medical education has traditionally showcased techniques and skills of giving feedback, and models used in staff development have focused on feedback providers (teachers) not receivers (learners). More recent definitions have questioned this approach, arguing that the impact of feedback lies in learner acceptance and assimilation of feedback with improvement in practice and professional growth. Over the last decade, research findings have emphasized that feedback conversations are complex interpersonal interactions influenced by a multitude of sociocultural factors. However, feedback culture is a concept that is challenging to define, thus strategies to enhance culture are difficult to pin down. In this twelve tips paper, we have attempted to define elements that constitute a feedback culture from four different perspectives and describe distinct strategies that can be used to foster a learning culture with a growth mind-set.

Introduction

Newer definitions of effective feedback emphasize learner self-assessment, behavior change and professional growth (van de Ridder et al. 2008; Bing-You and Trowbridge 2009; Delva et al. 2011; Molloy and Boud 2013; Boud 2015). Feedback training initiatives are gradually shifting away from provider technique-focused approaches to receiver goals and impact-focused approaches (Telio et al. 2015; Sargeant et al. 2015a; Bing-You et al. 2017b). Yet, teachers and learners may not agree on the adequacy and quality of feedback, with learners frequently reporting vague and non-actionable faculty feedback even when faculty believe they have provided meaningful and specific feedback (Bing-You and Trowbridge 2009; Anderson 2012; Ramani et al. 2017a, 2017b). Faculty also hesitate to provide "negative" feedback to avoid hurting learners' feelings and self-esteem; this could result in feedback that is not goal-directed or actionable (Mann et al. 2011; Sargeant et al. 2008, 2011b; Watling 2014b; Bing-You et al. 2017a; Ramani et al. 2017b). If the knowledge gained through research studies is not communicated to feedback receivers and providers, this could lead to a mismatch between what is known and what occurs in real-life.

Over the last decade, medical educators have begun to place greater emphasis on the influence of sociocultural factors, such as relationships, perceptions of credibility and institutional learning culture on the content of the conversation and learner receptivity to feedback (Mann et al. 2011; Sargeant et al. 2011a; Eva et al. 2012). Telio et al. (2015, 2016) proposed that effective feedback interactions require an educational alliance between teachers and learners with a strong learner involvement in the process. Sargeant et al. (2015a, 2017a, 2017b) described the R2C2 model (relationship, reaction, content and coaching) emphasizing full learner engagement in the feedback conversation. Relationships and learner engagement would enhance the credibility of feedback provided. Watling et al. (2013a, 2013b, 2014) reported that the learning culture of medicine is dominated by focus on autonomy and lack of performance observation, in contrast to the culture of music or sports. While an institutional culture of politeness is conducive to learning and collegial work; it could hinder honest narrative comments on evaluations and constructive feedback (Ginsburg et al. 2015, 2016; Ramani et al. 2017a). The learning culture at institutions needs to be understood and addressed before instituting feedback initiatives aimed at bidirectional professional development.

The three levels of organizational culture described by Schein are applicable to the feedback culture in medical education (Schein 2017). The deepest level refers to unwritten values and assumptions of how the organization is viewed by the outside world (that's the way things are done here). The mid-level refers to written values and expectations such as mission statements and curricular documents. The visible level is characterized by how its members behave day to day to maintain the image presented to the world. These behaviors are influenced by practical realities and needs of daily life, and may even contradict assumptions and values. Each level, as it relates to feedback alliances, would need to be dissected and understood, and facilitators and barriers identified before successful staff development can be designed and implemented.

In this paper, we have reviewed the latest research which redefines feedback as a sociocultural process and generated practical strategies that teachers, learners as well as institutions can adopt to promote feedback aimed at

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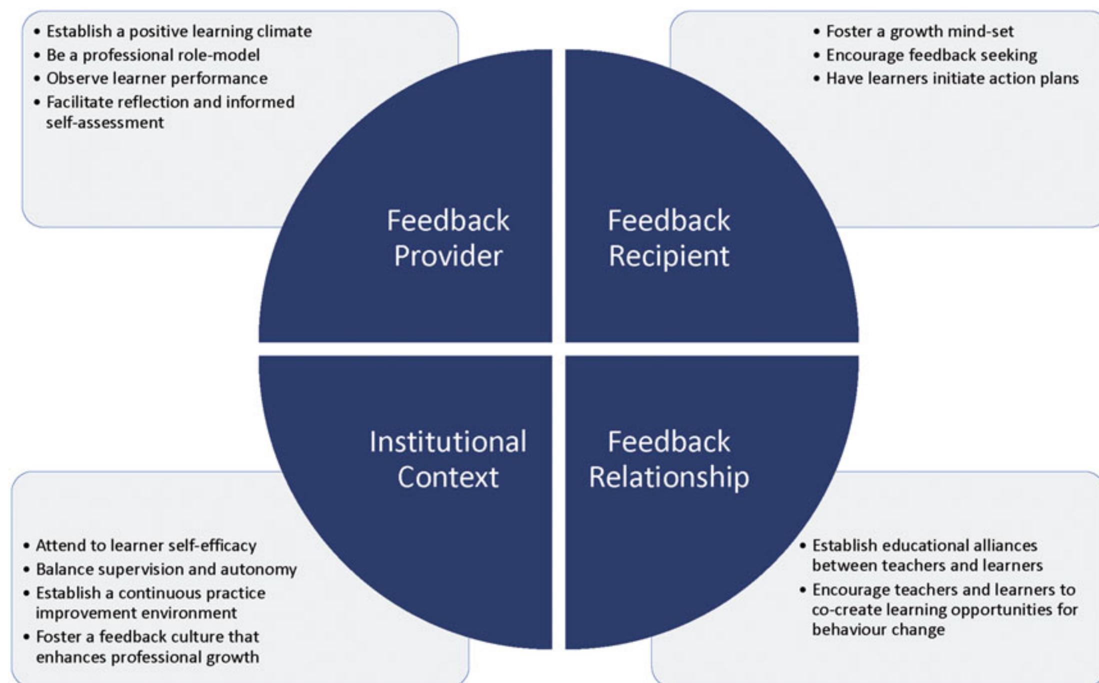

Figure 1. Establishing a feedback culture with a growth mind-set: strategies from multiple perspectives.

professional development. The following 12 tips to enhance the feedback culture are informed by our research exploring the impact of institutional culture on feedback in a postgraduate training program (Ramani et al. 2017a, 2017b, 2017c), supplemented by a comprehensive review of recent literature, as well as our collective experience in staff development related to feedback training. We classify these tips focusing on the sociocultural aspects of feedback under four key categories related to: Feedback providers, Feedback recipients, Feedback relationships, and Institutional context, these are depicted in Figure 1. Under each category, individual strategies are described in detail with a view to enhancing the culture of feedback and emphasizing a growth mind-set among teachers and learners.

Feedback providers

The following strategies could enhance the credibility and acceptability of feedback data, and potentially lead to behavior change and performance improvement. Though teacher-initiated, these strategies aim to improve the overall feedback culture rather than specific skills of feedback provision.

Tip 1

Establish a positive learning climate and be a professional role-model

Many teachers and learners react to upcoming feedback conversations with trepidation. Feedback providers can alleviate some of this negativity by proactively establishing a positive learning climate and setting expectations that they would facilitate frequent, formative feedback conversations that focus on goals and observed performance. Even if the duration of the working relationship is short, establishing a congenial learning environment could lead to more productive feedback conversations. When teachers serve as role-models in demonstrating respect for all, willingness to welcome multiple opinions, and readiness to admit own limitations and errors, this would set the stage for growth-enhancing feedback and thus more acceptable to learners (Skeff and Mutha 1998; Srinivasan et al. 2011). The concept of two-way feedback conversations can also be discussed, emphasizing teachers' openness to receiving feedback from learners.

Tip 2

Use direct observation of performance to generate feedback data

Learners' perception of the credibility of feedback can be influenced by several factors including the source of feedback, their relationship with the feedback provider, the manner of its communication, and congruence with their own self-assessment (Mann et al. 2011; Watling et al. 2013b; Watling 2014a). Direct observation of performance appears to be one significant determinant of credibility. Clinical learners are rarely observed by faculty during their interactions with patients or staff (Kogan et al. 2012, 2017). In contrast to the coaching culture in music or sports, clinical teachers often accept the accuracy of learner case presentations without direct observation of data gathering, particularly from more senior learners (Walker et al. 2017; Watling et al., 2014, 2016). It is important that clinical teachers observe their learners directly and frequently, and provide specific feedback on performance, thus enhancing learners' perception of its credibility.

Tip 3

Facilitate reflection and informed self-assessment

Learners tend to reject feedback that conflicts with their self-assessment; however, unguided self-assessment is

fraught with inaccuracies in calibration of own performance (Sargeant et al. 2007, 2011a). Educational experts have argued that external data from multiple sources should be combined with self-reflection for accurate self-appraisal (Eva and Regehr 2008; Sargeant et al. 2009, 2010; Mann et al. 2011). Additionally, initiating conversations with self-assessment can help teachers to diagnose learners' insights (or lack of) into their strengths and weaknesses, and serve as a starting point for reinforcing as well as constructive feedback.

The Johari window, a framework described by psychologists to enhance self-awareness in interpersonal communications, can serve as a robust model for feedback conversations (Luft 1969). The window consists of four quadrants, with varying levels of awareness of behaviors: (1) what is known to self and others (open), (2) unknown to self but known to others (blind), (3) known to self and unknown to others (hidden), and (4) unknown to self and others (unknown). Applying this model to feedback: reinforcing strengths and enhancing self-efficacy can expand the open quadrant; promoting a learning goal-orientation and feedback seeking can address the blind quadrant; building educational alliances and trusting relationships can narrow the hidden quadrant; and stimulating a spirit of self-discovery can shrink the unknown quadrant (Ramani et al. 2017c).

For feedback recipients

The following three tips would help stimulate a growth mind-set among learners. By encouraging this mind-set and providing training in these learner-initiated strategies. Institutions can promote a culture where learners accept and assimilate feedback.

Tip 4

Foster a growth mind-set among learners

Two types of mind-sets have been described by Dweck, a fixed mind-set and a growth mind-set (Dweck 1990, 2006). Learners with a fixed mind-set believe that success is driven by innate ability, perceive failure as a negative statement of their abilities and tend to reject constructive feedback. Learners with a growth mind-set believe that success results from hard work, learning, training, and ongoing learning, and that learning comes from failure. A growth mind-set would allow learners to engage in feedback seeking, be more receptive to constructive feedback, and incorporate feedback into daily performance. Teachers have an important role to play in stimulating a growth mind-set by using language that focuses on performance (e.g. a teacher might say, "it might be easier to feel hepatomegaly or hear a systolic murmur if you used the following technique") rather than words that simply praise or judge (e.g. "excellent job, poor patient communication"). Institutions should encourage a growth mind-set by normalizing constructive feedback, prioritizing professional development at all levels, and providing training in receiving and assimilating feedback into performance.

Tip 5

Encourage feedback seeking behavior

Learners can gain awareness of their strengths and areas needing improvement through active feedback-seeking which helps in calibrating the gap between their current performance and desired performance (Crommelinck and Anseel 2013). Feedback-seeking behavior can be influenced by goal orientation of individuals (VandeWalle and Cummings 1997; VandeWalle et al. 2001; Teunissen et al. 2009; Teunissen and Bok 2013). Professionals with a performance goal-orientation focus on performance that creates a good impression, and may not welcome feedback that might reveal limitations and threaten their image. This tendency has been referred to as "playing the game" (Gaunt et al. 2017). On the other hand, professionals with a learning goal-orientation focus on achieving mastery in their field, and are more likely to seek and accept constructive feedback that helps them grow. Institutions can foster a learning goal-orientation among all levels of learners by setting explicit expectations for continuing learning and improvement, providing training on establishing specific learning goals, and seeking specific goal-directed feedback.

Tip 6

Promote learner initiated action plans for behavior change

Medical learners state that feedback from their teachers is often not "actionable" and a typical feedback conversation does not conclude with a performance improvement plan (Bing-You and Trowbridge 2009; Anderson 2012; Ramani et al. 2017a, 2017b). Even if teachers recommend specific action plans, it cannot be assumed that learners would change their practice. Behavior change is more likely if adult learners formulate their own learning goals, communicate these to their teachers, calibrate where they are in terms of these goals and describe steps to achieve these goals. As adult learners and future reflective practitioners, action plans are best initiated by learners for performance improvement. These strategies described are more consistent with newer conceptualizations of feedback which emphasize impact on learners rather than how it is provided (Molloy and Boud 2013; van de Ridder et al. 2015).

The feedback relationship

While numerous factors can impact a teacher-learner relationship, we focus on two key approaches to enhance feedback relationships. Each tip comprises multiple smaller steps that teachers, learners and institutions can employ in building effective relationships between teachers and learners.

Tip 7

Establish an educational alliance

Feedback conversations are complex interpersonal communications rather than simple one-way exchanges (Bing-You and Trowbridge 2009; Sargeant et al. 2008; Delva et al.

2011; Sargeant et al. 2011b; Watling 2014a, 2014b). Using the therapeutic alliance as a model, Telio et al. (2015, 2016) proposed an "educational alliance" framework to construct feedback conversations. Forming an alliance with their learners would allow educators to develop a more meaningful understanding of the context of learner performance and provide specific and useful feedback. Similarly, Sargeant et al. (2015b, 2017b) described the R2C2 model with the following suggested steps: establish relationships, explore reaction, check understanding of the content and coach for growth. Bing-You et al. (2017b) used the tango dance as a metaphor to move from a static one-sided feedback recipe to a dynamic partnership-based conversation. Applying these recent frameworks for feedback, institutions should encourage and orient teachers in establishing educational alliances/relationships with their learners, emphasize learner engagement in the conversation, and focus on assimilation of feedback and behavior change as end points.

Tip 8

Encourage teachers and learners co-create learning opportunities for behavior change

Learners must have time to assimilate feedback and opportunities to change practice.

In their research, Könings et al. (2005, 2014) reported that a participatory design, which combines perspectives from teachers, learners and educational leaders, is a more effective strategy for designing learning environments. We therefore propose a participatory design loop for a feedback conversation comprising: establishment of goals by learners and teachers, direct observation of performance by teachers, feedback conversation that includes facilitated self-reflection, creating learning/work opportunities to incorporate feedback and change behavior, debriefing of new performance, and reentering the cycle through discussion of new goals by teachers and learners. This is depicted in Figure 2.

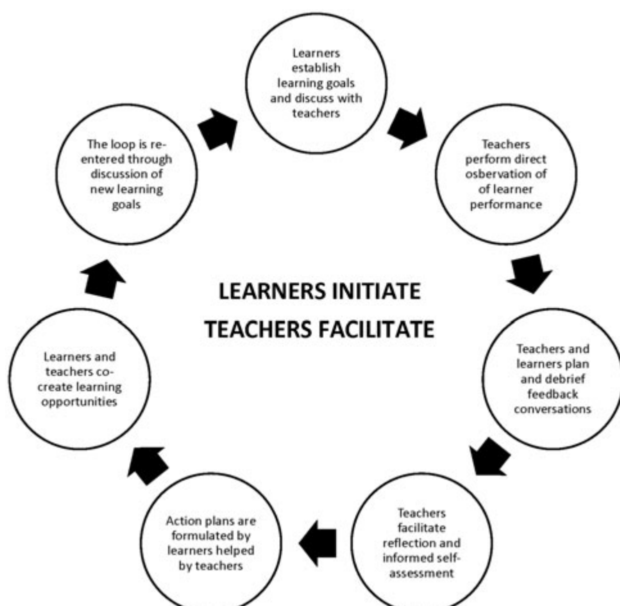

Figure 2. A participatory design feedback loop: co-creation of learning opportunities by learners and teachers.

The institutional context

Institutions have a major role to play in setting the stage for feedback that promotes a learning culture that prioritizes professional growth. We focus on four key tips in this section, that are complex in themselves and comprise multiple simpler strategies.

Tip 9

Ensure appropriate attention to learner self-efficacy

"Face" is a term used to describe the image individuals desire to project to the outside world (Brown and Levinson 1987). Face is further classified as positive and negative (see tip 10), where positive face is an individual's desire for affirmation or self-efficacy. Medical teachers are often reluctant to provide constructive feedback, for fear of hurting learners' feelings or damaging their self-esteem (Sargeant et al. 2008; Watling et al. 2013a; Watling 2014b; Bing-You et al. 2017a). Though learners report that constructive feedback is more instrumental in changing practice, they too tend to seek positive feedback and avoid feedback that could damage their ego or image in summative workplace based assessment settings (Gaunt et al. 2017). Since confrontation with one's behavior has been identified as the first step to the change of behavior (van den Eertwegh et al. 2015), a formative assessment setting could help learners to better balance ego costs (negative feelings resulting from constructive feedback) and ego benefits (increased self-esteem resulting from reinforcing feedback) leading to increased acceptance of constructive feedback (Gaunt et al. 2017). Hearing constructive feedback will likely upset learners regardless of how it is phrased, but it is essential for their development and progression to the next level. Institutional expectations for ongoing formative feedback and establishing a climate of assessment for learning would be key in promoting professional growth.

Tip 10

Promote optimal balance of supervision and autonomy

The term negative face has been defined as "the want of every competent adult member that his actions be unimpeded by others" (Brown and Levinson 1987). A key goal of clinical training is to help learners proceed towards independent practice, yet patient safety and quality concerns necessitate supervision of learners (Ramani et al. 2017b; Watling et al. 2013a). Thus, it is important for clinical teachers to balance supervision with autonomy. Ten Cate et al. (2004) described the concept of shared guidance where teachers can move along a spectrum of full external guidance of learners to shared guidance and finally full internal guidance when learners are capable of independent practice. Since needs and goals of learners are different at different stages of their training, shared guidance requires an ongoing dialog with learners, monitoring of their progress, and adapting teaching to their learning needs. Moreover, clinical learning occurs during social interactions with a team including teachers, peers, and multidisciplinary professionals, therefore a model of co-regulated learning (rather

than self-regulated learning) may better serve postgraduate medical education, especially in the context of entrustment-based assessment decisions and help teachers balance supervision with autonomy (Rich 2017).

Tip 11

Establish a continuous practice improvement environment

In medical education, feedback is often referred to as positive or negative and the term remediation is used to describe performance improvement plans. Thus, constructive feedback can have negative connotations for both feedback providers and recipients. Institutions can play an important role in normalizing the presence of strengths and weaknesses among professionals at all levels by encouraging the use of non-judgmental frameworks with a continuous improvement approach. The Plus Delta approach is a formative evaluation process described by the Lean Construction Institute (http://leanconstruction.org/media/learning_laboratory/Plus_Delta/Plus-Delta.pdf). This approach is framed in improvement language (what would you change or do differently, how would you improve your practice) rather than positive or negative judgmental language (good, bad, did well, did poorly, satisfactory, and unsatisfactory). The plus refers to what went well and delta refers to what could be changed to improve future practice. This framework can be applied to individuals or teams. Training teachers and learners in the use of language framed in a continuous practice improvement approach could normalize constructive feedback, thereby encouraging exchange of meaningful constructive feedback which is more acceptable to learners.

Tip 12

Emphasize a feedback culture that enhances professional growth

It is important for institutions to explicitly establish a learning culture that is conducive to growth enhancing feedback at all levels. Such a culture would emphasize: explicit guidelines for ongoing formative feedback; a learning environment that normalizes strengths as well as areas for improvement among learners and teachers; longitudinal and trusting relationships between learners and teachers; direct observation of performance; feedback seeking among teachers and learners; and training in goal-directed and actionable feedback conversations. The Royal College of Physicians and Surgeons of Canada has recommended a coaching mindset among teachers to promote performance improvement among clinical learners, this model would be helpful in faculty development worldwide (http://www.royalcollege.ca/rcsite/cbd/implementation/wbas/coaching-wbas-e).

Finally, individual institutional feedback initiatives need to move away from training that focuses on recipes for "giving" feedback towards training that emphasizes relationships, learning-goal orientation, and a growth mind-set.

Conclusions

The definition of a feedback culture and what elements contribute to such a culture can vary between institutions and even between departments at a single institution. In this twelve tips paper, key aspects of a feedback culture are described from four different perspectives, as depicted in Figure 1, with specific principles and strategies that could be applied at any institution by medical educators worldwide. Application of these tips can facilitate the feedback culture at institutions in the following ways. Feedback providers or teachers can use these strategies to build educational alliances with their learners and provide credible feedback that is more acceptable. Language used during conversations can vary based on the context, the learners, the relationship, level of performance, etc., there is no "one-size-fits-all". Feedback receivers or learners can use these strategies to develop a growth rather than a fixed mind-set, have a learning goal rather than performance goal-orientation, be proactive in feedback-seeking and assimilation, thereby targeting performance improvement. Institutions can employ these tips to design dynamic feedback training that focuses on relationships, performance observation, normalizes constructive feedback and targets behavior change. Ultimately, we believe that feedback that results in professional growth requires a continuous practice improvement mind-set, attention to teacher–learner relationships and an institutional learning culture that moves away from feedback recipes to improve feedback practice.

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Disclosure statement

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

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