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Your Goals, My Goals, Our Goals: The Complexity of Coconstructing Goals with Learners in Medical Education

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ABSTRACT

Phenomenon: Despite a long-standing recognition of the importance of learning goals in feedback, there has been relatively little research on how to address mismatches between learner goals and preceptor goals in medical education. Our study addresses this gap by reporting on challenges and strategies around goal coconstruction as identified by clinical educators who were learning and attempting to implement a goal-oriented feedback approach in their own teaching contexts. *Approach*: We employed a qualitative, design-based research methodology to study how 5 clinician educators incorporated goal-oriented feedback into their teaching practice. Participants attended workshops on goal-oriented feedback and reflective writing. They then narratively reflected over a 6-month period on their attempts with goal-oriented feedback and shared these reflections in periodic facilitated group discussions. Themes were developed using iterative thematic analysis of group discussions and individual exit interviews. *Findings*: Participants identified several benefits of goal setting in all environments. They perceived improved rapport with learners and developed empathy for the vastness of learner goals. However, they experienced several struggles especially when learner and preceptor goals did not match. These included (a) how to address learner goals that were not easily amenable to a coconstruction, (b) how to coconstruct goals while actively running a clinical practice, and (c) how to remain learner centered while raising preceptor goals based on perceived gaps. *Insights*: Mismatches between learner and preceptor goals are inevitable and frequent. Preceptors must find ways to coconstruct goals with learners in various learning environments. That said, in enacting goal-oriented feedback, preceptors are effectively using feedback throughout the teaching and learning interaction to coconstruct the learning environment, resulting in improved rapport with learners and emphasizing why it is important to focus feedback around goals.

KEYWORDS

feedback; co-construction; goal oriented; faculty development; learner centered

Phenomenon

The importance of establishing mutually agreed-upon goals in feedback discussions has been emphasized repeatedly in medical education literature.[1–5] In his well-cited article, Ende recommended that "feedback should be undertaken with the teacher and trainee working as allies, with common goals."[1(p779)] More recently, Ramani included the importance of goals as one of the four elements contributing to a successful feedback culture.[3] Practically, Sargeant and colleagues recommend the R2C2 model as a framework for facilitating feedback conversations that encourage goal-oriented collaborative discussions between residents and preceptors, and clinicians in practice.[4,6]

Goal-oriented discussions become more necessary with the introduction of competency-based medical education.[7] Competency-based medical education is highly outcome focused and therefore necessitates more targeted learning. Further, there is a growing emphasis on improving self-regulated learning skills of medical students both in preclinical and clinical settings.[8,9] This suggests that preceptors will need to exert a concerted effort to focus on specific goals of learning to ensure that learners are aware of, and can meet, competencies required to develop as self-regulating practitioners. However, goal sharing is likely insufficient by itself. Rather, learner–preceptor negotiation and prioritization of goals will ultimately lead to more expansive learning.[10]

Thus, to enact effective feedback, it is important for the preceptor to both discuss learning goals with learners and understand how to collaborate with them around the identification and accomplishment of these goals. This issue has been discussed in higher education literature, with Nicol and MacFarlane-Dick offering strategies to overcome goal mismatches in a classroom setting.[11] However, these strategies do not necessarily lend themselves to the small-group learning or clinical environment. In fact, there is limited literature to guide preceptors in determining which goals or whose goals should be the focus of feedback as highlighted in an autoethnographic study of a goal-oriented approach to feedback.[12] The study shed light on the vast range of learner and preceptor goals that arise in feedback conversations, including implicit and explicit learner, preceptor, and program goals. The variety and complexity of learning goals result in the potential for mismatch in goals between students and preceptors. Such mismatches require goal negotiation (e.g., to come to an agreed-upon prioritization of goals) and/or goal coconstruction (e.g., to create new goals that satisfy the expectations of both).[12]

A greater understanding is needed around how preceptors might flexibly negotiate and/or coconstruct goals using goal-oriented feedback (GOF) discussions. Specifically, we need to explore the practical and conceptual barriers to implementing GOF into practice, including the complexities of how to engage with learners to determine which learning goals to focus on. To this end, we developed an exploratory study in the context of a newly created longitudinal faculty development program organized around the development of faculty skills in GOF. This model allowed us to teach the principles of GOF in a "classic workshop" style and to longitudinally observe and support faculty members' efforts to implement these principles into practice. Through our study, we gained insights around challenges of implementing GOF into various teaching practices, including how to address mismatches in learner and preceptor goals.

Approach

The study was conducted through the development of a longitudinal faculty development initiative. We first shared the concept of a GOF approach with a group of clinician educators in a workshop. We then explored their experiences of its implementation and their consequent perspectives of its successes and challenges in their own settings through a series of four group meetings. Specifically, we explored how

> **Box 1.** Definition of Goal Oriented Feedback:
> GOF is feedback that focuses attention away from a critique of the learner and moves towards a discussion of desirable and achievable goals. GOF involves a dialogue with the learner, focusing not on their weaknesses or flaws, but on negotiating what needs to be learned and accomplished to evolve as a physician.[12]

this approach may be applied to their teaching settings, what concepts were more difficult to implement, and why these difficulties arose. To this end, we employed a qualitative, design-based research (DBR) methodology.[13] This methodology allows for both the refinement of theory and the advancement of educational practice. DBR occurs in real-life settings and involves cycles of design, evaluation, and redesign. In this article, we focus our findings around the advancement of current theory, specifically feedback theories, through a better understanding of GOF. Our DBR study also sought to "test a design": the process of longitudinal faculty development with facilitated guided reflection on the implementation of a teaching skill (GOF). The focus of this article is our evolved theoretical understanding of the practices of GOF as an approach to providing feedback; however, to contextualize the study, we briefly comment on the workshop format.

Study design, data collection, and analysis

The faculty development initiative began with two initial workshops led by Laura Farrell—one on GOF and one on narrative reflection. Members of the research group (LF, GB, GR, SB) developed the workshops based on findings from a previous study.[14] The GOF workshop objectives included a discussion of current tensions in the feedback literature, and a description of GOF (Box 1) and how it might address these tensions.

The workshop also provided examples of how GOF might be applied in different settings (e.g., how to negotiate to prioritize goals of learning or how to coconstruct a new mutual goal) and outlined a plan for using GOF (e.g., how to address potential barriers). In a second workshop (on the same day following a break), participants were introduced to the concept of narrative reflection and were provided a reflection template to help structure their reflections about their experiences in trying to implement GOF.

Participants were then asked to return to their practices and use the reflection template to reflect on subsequent feedback interactions in their teaching practice, with the intention of sharing these reflections

at future group meetings. The group met four times in the subsequent 6-month period, during which participants discussed their experiences, both positive and negative, with goal-oriented feedback and explored strategies to address encountered difficulties. These 2-hour group meetings were facilitated by GB, who was familiar with GOF.

The conversations at each meeting were recorded and transcribed by a research assistant, GS. To ensure that participants had an opportunity to share individual thoughts about the overall experience, exit interviews were also conducted and focused on the participants' impressions of using GOF in their teaching practice. Both the meeting transcripts and narrative responses from the semistructured interviews were analyzed thematically.[15] Data were coded and analyzed for developing themes with the aid of Dedoose (http://www.dedoose.com; Sociocultural Research Consultants, Manhattan Beach, CA), a cross-platform application used to review and collaboratively analyze qualitative data, by three members of the study (LF, GB, GS). Codes included perceived challenges and benefits of using GOF. Members of the research group (GR, GB, LF, GS) discussed developing themes iteratively throughout the study, meeting between sessions. These discussions influenced the facilitation of future group meetings, as GB went back to the meetings with certain probing questions that would help further inform not only the participants' use of GOF but also the research team's understanding of the participants' experience with GOF. In addition, LF met with the study group prior to the fourth meeting to clarify concepts and answer questions about GOF, further refining the initial design of the faculty development in keeping with design-based research. This meeting occurred due to ongoing discussions within the research team around participants' apparent difficulties implementing GOF when performance deficits were perceived or goal mismatches occurred. The final themes described next represented recurrent challenges discussed in all four sessions.

Participants

In total, five clinical educators—four female and one male—consented to participate. All five participants were family physicians, and two of these worked in specialized practices: oncology and sports medicine. The number of years in practice varied from 1 to 43 years. These participants taught in both undergraduate and postgraduate medical education and in various small-group sessions (i.e., clinical skills

sessions, facilitated reflection groups, and case-based learning) and ambulatory clinics and provided remedial support. Teaching interactions with students varied between one small-group session to a longitudinal 8-month course.

Ethics and recruitment

The University of British Columbia, University of Victoria and Island Health, granted harmonized ethical approval for this study (BC2015-048). An e-mail invitation was then sent via third party to physicians teaching medical students and residents in Victoria, British Columbia, at the Island Medical Program, a University of British Columbia distributed site. Respondents were excluded if they were unable to commit to monthly meetings or if they were not involved in teaching during the time of the study. All participants were assigned a number in transcription to ensure confidentiality. Some participants were unable to attend all group meetings for unforeseen reasons, but no participant withdrew from the study.

Findings

The initial goal setting with learners was seen as one of the greatest benefits around incorporating GOF into practice. As one participant explained, "Just asking learners what their goals are at the beginning … was a really simple outcome, but it's dramatically changed my relationship with learners and the way my teaching goes during the day" (P1, exit interview). Participants seemed to develop an understanding of the variety and complexity of both learners' goals and their own goals (e.g., to be able to evaluate the learner and see them improve.) The realization that medical students have innumerable goals seemed to result in increased empathy toward them. Participants recalled their own training as medical students and admitted that they had not thought about what their goals were:

> P3: I was terribly shocked at how little I knew. [laughs]

> P5: And then you're going everything's my goal. [laughter]

> P3: But it's also important to assure people that you know, it's doable, and it feels overwhelming only for the initial period, and then you start. (Meeting 1)

In addition, participants found that GOF provided a framework for structuring teaching sessions. For example, by asking learners their goals in clinical

skills, participants realized they could focus teaching on what learners stated they needed to review instead of trying to cover all of the vast amount of information provided for each session. Participant discussion of the benefits of GOF led to the realization that they were developing better rapport with students. One participant wondered if that was because learners appreciated that someone was *even thinking* about their goals, stating, "Often, its traditionally been such an uneven relationship. So it makes it much more like a partnership, in trying to get everybody's goals achieved" (P3, Meeting 1).

Despite these recognized benefits, challenges with enacting GOF became apparent, as preceptors attempted to navigate how to work with learners to determine on which goals to focus. These challenges included (a) how to manage learner goals that are too vague, too broad, or too specific; (b) how to discuss goals "in the moment" when a performance gap is observed; and (c) how to stay learner centered while raising preceptor goals based on perceived gaps. Each of these three challenges is elaborated next.

Managing learner goals that are too vague, too broad, or too specific

At each meeting, participants described and explored their ongoing difficulty in prioritizing and discussing feedback around learning goals with students. Many of these difficulties seemed due to the types of goals that students were bringing forward. When learner goals were too vague, too broad, or too specific, participants had difficulty finding ways to meet these expressed goals and were not sure how to effectively discuss this with students. However, through group discussion of various scenarios, the participants were able to troubleshoot how to approach these problems. This resulted in strategies for both encouraging more appropriate goal setting and finding ways for goal coconstruction.

Participants noted that some students had unclear (or no) learning goals. For example, when describing attempts to use goal-oriented language to engage two learners, one preceptor expressed discouragement, because the students did not have any goals: "That was the thing, they really hadn't given it any thought at all. … So yeah I found that really frustrating" (P3, Meeting 4). This situation led participants to discuss what might be done if learners' goals are vague or do not seem to exist. Suggestions included sharing preceptor goals around developing skills as a communicator, such as "listening to the patient and developing

good communication skills … being empathetic and … finding that common ground" (P4, Meeting 2) or suggesting course goals to consider. However, there were concerns that these strategies would work only if students were engaged in the learning process. As Participant 3 said, "It was more like they wanted to be spoon fed. Like 'teach us this' … if people don't speak up, and interact within that adult paradigm, it doesn't work" (P3, Meeting 4).

There was also discussion around how to narrow a learner's goal if it is quite broad. One learner told her preceptor that she wanted to learn 10% of what that preceptor knew, and another learner "wanted to work independently." In each case, the participant wasn't sure how to engage with that goal. With respect to the goal to work independently in a busy clinic, the preceptor felt an obligation to support this broad goal once it was expressed but had difficulty balancing it with other needs of the clinic:

> The learner who I was working with, her specific goal for the day was to be independent and that's what she really wanted was to just gain independence in the clinic and be able to kind of run a clinic on her own. So, I was like ok, I kind of sit back. … And I had a hard time, 'cause she would be running behind and I knew that her goal was to be independent but its balancing also a waiting room full of people. (P1, Meeting 2)

The group discussion resulted in the realization that one of the roles of a preceptor is to help the learners work toward *portions* of a bigger goal in the context of a specific situation. Discussions around breaking down a broad goal with the learner can effectively result in coconstructing goals. In the preceding example, another participant proposed engaging the learner in a discussion around possible subgoals important for achieving independent practice (e.g., time management):

> … independence is very broad and the way we define it, and I was thinking how I would handle that if I was in that situation. And I wonder if, just hearing the story if, maybe I would even ask the resident to break that [independence] down and really define what that means in the context of a family practice office to them. (P4, Meeting 2)

On the flip side, participants also found that learner goals could be too specific. This was frustrating for one participant, as many learners seemed to have only one stated goal (learn joint injections) for a month-long clinical rotation. This goal captured neither the broad scope of what could be learned around sports medicine, nor the participant's goal of teaching about how to be a competent, compassionate

physician. Based on discussion with the group, the participant began to negotiate with learners to adjust their goal. The participant explained to learners that they would have opportunities to do injections but that the participant would also emphasize the importance of going beyond developing competency in this procedural skill to developing competency as a clinician.

> Well in certain areas, when I think of the residents coming in and they say "I want to learn how to do injections." This is a big one. And I say "no you don't [just] want to learn to do injections, you want to learn why you do injections and why you don't do injections." (P2, Meeting 4)

Thus, putting a specific goal into the bigger picture of becoming, or functioning effectively as a physician, provided a means to maintain the specific learner goal but broadened its scope, resulting in a coconstruction of goals.

Discussing goals "in the moment" when a performance gap is observed

The discussions regarding the problematic nature of the goals that learners brought to the teaching interaction tended to focus on conversations that occurred at the beginning of teaching encounters. However, a second problem identified by preceptors in enacting GOF was in how to initiate goal-oriented feedback discussions "in the moment," especially in the clinical setting. One participant spoke of always having a sense of "l'esprit de l'escalier" (the predicament of thinking of the perfect reply too late), such that the goal-oriented feedback that the participant wished to engage in came to the participant only upon reflection after the learner left.

> The challenge is consistently thinking fast enough within the—and using the framework. So, because, if you sit around—or at least I find that if I think about it, and say, "Oh ya, I am supposed to be using this goal-oriented feedback" so now how do I manufacture the conversation so it fits into a goal-oriented context? You know then the moment is gone. It has to be an absolute reaction on the spot. (P2, Meeting 3)

Concern about the time required to have these conversations was also an issue, especially in a clinic practice. This was partly because the conversation may require bringing forth goals that had not been discussed. In addition, it was felt that goal-oriented discussions about skills (history presentation or physical exam) might be straightforward, but if, for example, a learner showed a gap in cultural sensitivity during clinic, it was difficult to address a performance gap using goal-oriented language.

> … but the time or the skill that's required to say, okay, you know "this happens, so therefore maybe we should re-examine some of the goals" is, you know, seems to be—I haven't been able to apply it that well, to put it that way. (P2, Meeting 3)

In contrast, this seemed to be less of an issue in the small-group nonclinical sessions, in which discussing performance gaps in the moment are less likely to occur and there is time set aside for formative feedback. In this case, a preceptor can check in with an individual learner about whether goals have been met and there is the opportunity to coconstruct new goals.

> … we went around and sort of talked about each person's goals, which were quite varied and interesting, and what I had the opportunity to do is write down their goals, and we just did their midterm formative assessment and I could kind of say, "okay, here's what you said. Here's what I observed. How did it go for you?" kind of thing. (P5, Meeting 3)

Clearly, in the clinical setting, where patient care needs to continue in a timely manner, it is more difficult to stop and have conversations that will help shed light on the underlining goals motivating actions, especially as deficits observed may have nothing to do with initial goals discussed. Participants felt that more practice was needed to improve. In addition, there were requests for more examples that would allow them to discuss and practice using goal-oriented language in these settings.

Staying learner centered while raising preceptor goals based on perceived gaps

Participants seemed to develop a deeper understanding of the concept of learner-centered teaching as the study progressed. In exit interviews, several participants likened coconstruction of learner goals to patient-centered care. In the same way that a physician must be explicit about treatment options, a teacher must be explicit about what needs to be learned and must understand the learners' needs. Thus, participants came to realize that it was important to move beyond simply stating the preceptor goal. Preceptors must be able to explain why that goal is important while acknowledging the learners' goals, especially if these goals fit into a bigger picture. If done well, learners may then incorporate a goal suggested by the preceptor in a way that models a learner-centered approach.

I think it's kind of again going back and listening to what they say, as their goals, but then adding a bit of extra stuff in and just putting it into a bigger broader context. … So I think kind of bridging, like acknowledging what the learner's goals are, but then I think it's the teacher's job to show what they don't know, and don't know what they don't know. And kind of bring it into light and be like, "this is what your goals are, but bigger picture, this is what I see." (P1, Meeting 2)

The group also discussed that the preceptor may be able to introduce different learning goals if the learners are reassured that their stated goal may be met later in the curriculum or in another setting. As in the preceding example of "learning to do injections," the preceptor was able to strategize with learners about how they might increase their practice with injections at the family practice office. In this sense, participants were starting to distinguish between learner-directed goals (simply accepting the learner's goals) and learner-centered goals (negotiating and coconstructing goals between preceptor and learner with an explicit appreciation for the learner's perspective on want he or she is trying to achieve).

In the group settings, the concept of being learner centered was more complicated. One participant initially felt that she was driving the group goals by expressing that all members need to participate in conversations. She then had feedback from a learner who was finding this difficult and was seeking input on how to improve. Going back to the group, she realized that the group was on board with finding a way to ensure equal participation, and together they developed an action plan. Although in the end all agreed on a common goal, this situation did cause her to reflect on the complexities of being goal oriented in a group, as there are the preceptor goals, individual learner goals, and the group goals to consider, and she wondered where the focus should be if she is trying to be learner centered.

Insights

The experiences of our participants engaging in GOF demonstrate that eliciting learner goals can help focus both teaching and feedback interactions. Preceptors can use the goals stated to select and tweak content to be student relevant rather than simply teaching content with an overlay of the teacher's (implicit) goals. Further, the exercise of eliciting and sharing goals was quickly recognized by participants as a useful mechanism to develop rapport with students, partly because the sharing of goals seemed to create empathy for the

challenges of learners. That said, goal discussions need to translate into meaningful interactions to improve learner competencies if feedback is to be useful.[2,3] To this end, deciding which goals should be the focus of these interactions is important but can be challenging, especially in the clinical environment. Therefore, the following discussion focuses on how GOF allows for a coconstructed learning environment and on the subtleties around goal coconstruction that were revealed.

Through our findings, we came to understand that engaging in GOF may be a means for preceptors to engage in coconstructive teaching activities. Specifically, in coconstructivism theory, preceptors aid in the intellectual development of students by (a) scaffolding and role modeling the activity in which students are expected to engage, (b) actively participating with learners in dialog around learning, (c) negotiating shared meaning, and (d) advocating that specific standards are achieved.[16] These elements can be met by goal-oriented feedback discussions. GOF discussions require initial goal setting and feedback around goals, where the preceptor role models the need for goals and engages students in dialog around their goals. If goal mismatches occur, the negotiation of goals between preceptor and learner is required. As we have articulated elsewhere,[12] however, this negotiation should not merely focus on which or whose goals to prioritize but rather, if done well, can generate new goals that address both learners' perceived needs and preceptors' expectations. Thus, this coconstructed version of negotiation allows the goals to remain learner centered while ensuring that learners meet professional standards.

The initiation of goal exchanges at the beginning of preceptor/learner interactions was readily accomplished by participants in the study. In this way, the participants were role modeling the importance of goals by sharing their own goals and by engaging the learner in a dialog around their goals. The importance of this dialog was underscored by our study as participants identified challenges in managing learners' goals once identified. Although preceptors came to know their own goals through repeated exercises and reflections, students were not always able to express their goals at the moment of the request, as they may not have been asked about goals before. Further, if students did come prepared with specific goals, mismatches between learner and preceptor goals often occurred. These mismatches could lead to preceptor dilemmas regarding which goals should be the focus for teaching, feedback, or both. Dialogue that

encourages students to goal set (including suggesting possible goals if the student has not come prepared) and dissects broad goals into achievable activities during an interaction begins the coconstruction process. Broadening goals that have too narrow a scope to ensure rotation-specific standards is highlighted, as important learning milestones also lead to successful coconstruction of learning in the setting of GOF.

Over the course of the study, it became apparent that the negotiation of goals is not separate from the coconstruction of goals. Rather, it is one of the elements required to successfully coconstruct learning goals. This concept is emphasized by Reusser, who wrote that knowledge is created through communities who commit "to shared goals, mutual interactions and continual (re)negotiation of meaning."[17(p1)] This implies that negotiation of learning goals is inevitable in preceptor/learner interactions. In engaging in GOF, it is therefore important to recognize that as goal mismatches are identified upfront, and new goals are fleshed out when performance deficits are identified, preceptors and learners need to negotiate, and frequently renegotiate, in an effort to coconstruct shared goals. This goal negotiation should not be construed as one person coming out ahead but rather as a meaningful discussion around the importance of various goals brought forward and how to stratify them in a given learning environment. Furthermore, in the clinical environment, when learner performance deficits are observed, the ability to elicit and negotiate new goals will require ongoing practice and reflection for GOF to be effective.

Understanding the need for the coconstruction framing of goal negotiation may help to encourage a balance between the teaching environment being learner driven (in which the focus is on learner goals) and preceptor driven (in which the focus is on preceptor goals). This is important given the current emphasis on self-regulated learning. Learners may assume that preceptors are obligated to meet learner goals simply because the learner has stated them, but this may not be feasible in a given learning environment. Our study sheds light on how mismatches can be addressed in both small-group learning and clinical settings in medical education. If preceptors are aware of the relevance of various goals (the program's, their own, the learners'), this awareness allows for conversations that may involve negotiating, breaking down, or simply developing an understanding of why a goal is important. Thus, a learner's goals can be respected but need not be taken at face value as the required learning agenda. In this sense, the preceptor can be learner centered without being learner driven.

We recognize that our findings must be interpreted with caution given the setting and conditions of our study. Although participants worked in a variety of clinical and nonclinical settings, all participants were general practice physicians from a single educational institution. In addition, we note that our use of a longitudinal workshop and our research question led us to focus on the similarities and convergences in our participants' evolving understanding of GOF. These factors may have underrepresented any contextual differences between preceptors that may affect the uptake of GOF. Future studies involving a variety of specialties and educational contexts may be helpful to further explore the nuances of GOF and its effective uptake. In addition, although this study provides insight on the preceptors' perspectives of enacting GOF, research exploring the learners' perspective of GOF and whether goal coconstruction improves learning and patient care will be important.

Despite these acknowledged limitations, however, through this DBR study we were able to develop a better understanding of what GOF is and what faculty need to understand to enact it well. In particular, three key messages need to be emphasized. First, goal discussions help build a collaborative learning environment as learners and preceptors become aware of and come to appreciate each other's myriad of goals and expectations. Second, these goals will often not align and need to be negotiated; therefore, preceptors need to create space to allow for dialog. As part of this dialog, both preceptors and leaners need to understand that goal negotiation involves not merely picking among the various goals expressed but a coconstruction that evolves disparate goals into a new set of mutually satisfying collective goals. Last, in providing opportunities to coconstruct learning goals, preceptors can create a learning environment that is learner centered but not exclusively learner driven. In practical terms, and in keeping with DBR, these concepts around goal coconstruction in the setting of GOF have now been explicitly incorporated into ongoing GOF workshops given to various teaching faculties.

Funding

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