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THE FEEDBACK FALLACY IN LEARNING: MAKING PRACTICE AND INTERDISCIPLINARITY COUNT

Case
Study

Keywords

Feedback;
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Abstract

For decades, teachers and managers have used feedback to praise and criticize just about everything their students or employees do, mainly with a corrective purpose instead of improving performance. What should feedback be, and how literate should formative leaders and learners be so that feedback will fulfil its prophecy of improving their learning process and performance? Conversely, how do feedback strategies encourage or inhibit learning? This interdisciplinary paper contributes to the feedback scholarship by triangulating the main debates around feedback from a psycho-pedagogy and educational neuroscience point of view with contextual practice-based feedback examples from over seven years of university-level teaching and career mentorship experiences in cross-cultural engagements. This paper showcased cross-cultural feedback practices. Specifically, it used examples of feedback practices as a teaching tool, treatment, command, and costly commodity from the Romanian academic context. On the other hand, in the UK academic context, feedback was portrayed as being practised as a learner tool, coaching, dialogue, and feedforward. Consequently, this reflective, interdisciplinary and practice-based article contributes to the literature and practice of feedback.

INTRODUCTION

Across the globe, organizations and universities use feedback as the primary tool for improving the learning process and students' and teachers' performance (Dawson, Henderson, Mahoney, Phillips, Ryan, Boud, & Molloy, 2019). Although for many decades, feedback has been used as a critical tool in the learning process, its traditional approach, which prioritized correction of wrongdoings with little or no suggestions on how to improve the highlighted wrongdoings, created a "fight or flight" brain defense and thus left and still leaves many associating feedback with irreversible failure, instead of feeling empowered to improve and perform better (Fong, Schallert, Williams, Williamson, Warner, Lin, & Kim 2018; Pereira, Flores, Simão, & Barros, 2016).

However, the role of feedback persists to be central to learning and improving performance across universities and organizations, although its strategies remain widely decontextualized and unpractical theoretical models, discounting the need for feedback literacy of the parties involved (Fong & Kohnke, 2022). Moreover, this approach leaves learners questioning its importance and thus demotivated to engage with it (Jellicoe & Forsythe, 2019) and many times unaware that "action without feedback is completely unproductive" (Laurillard, 2002, p. 55). To be effective, the feedback must become part of the learning process and not mere information, occasional comment, or deal-breaker or maker mark as a reiteration of hierarchical power (Winstone, Boud, Dawson, & Heron, 2022). This failure to fulfil its stated aim suggests a misalignment between theory and practice and the limited, uni-disciplinary approach. Most of the research resides either in psychology, pedagogy or organizational fields and has only recently shaped the interdisciplinary science of educational neuroscience. Furthermore, empirical evidence suggests that the feedback's instrumental role in learners' development and performance lacks accountability and practice-based literacy (Boud & Dawson, 2021; Carless & Boud, 2018; Chong, 2020).

In the light of these debates and limited interdisciplinary practice-based evidence, this paper aims to draw on interdisciplinary perspectives of feedback and reflective practice-based lessons to assess what should feedback be and how literate should formative leaders and learners be so that feedback will fulfil its prophecy of improving the learning process and performance. Conversely, how do feedback strategies encourage or inhibit learning?

To do this, the remaining of this paper is structured as follows. First, it offers an overview of feedback's multidisciplinary views, including

psycho-pedagogy and educational neuroscience, critically assessing its meanings and the primary debates. Secondly, it discusses situational practice-based lessons from cross-cultural university teaching and career mentorship engagements reflecting upon contextual feedback strategies and how they affect learning. The last section reiterates this paper's contribution to the interdisciplinary scholarship and practice feedback. Finally, in the light of its time and context-bound limitations, it makes suggestions for future research direction.

FEEDBACK: AN INTERDISCIPLINARY THEORETICAL AND EMPIRICAL FRAMEWORK

Similar to other interdisciplinary concepts, the concept of feedback lacks scholar consensus. However, this paper adopts Boud & Molloy's (2012, p. 39) perspective, understanding feedback as "the process whereby learners obtain information about their work to appreciate the similarities and differences between the appropriate standards for any given work, and the qualities of the work itself, to generate improved work". Furthermore, this paper differentiates between formative and summative feedback as the primary forms of feedback used in academia and other learning organizations. Formative feedback is portrayed as "the information communicated to the learner to modify their thinking or behaviour to improve learning." (Shute, 2008, p. 42). Summative feedback is understood as the grades awarded to evaluate the learner's performance (Yan & Carless, 2021).

Today, more than ever, feedback plays a critical role in efficiently guiding the students in their formative learning journeys and thus an excellent opportunity to narrow the gap between education and labour market expectations. Yet, increasingly, feedback continues to be criticized as ineffective, poorly-timed and teacher-focused instead of student-focused to improve the learning process and the students' performance (Winstone, Balloo, & Carless, 2020; Winstone & Carless, 2019). However, feedback remains the primary instrument teachers and managers use to support learning amongst an ever-increasing diverse pool of learners, even when a limited number of learners find it valuable, understand it and engage with it (Henderson, Molloy, Ajjawi, & Boud 2019a). Consequently, feedback fails to achieve its aim of encouraging and improving the process of learning and learners' performance because it is learner-centric, corrective, and delivered as a piece of occasional information instead of being an effective and timely process of supporting and improving learners' educational and professional development journeys.

However, to understand what feedback means, its strategies and impact require an overview of its multidisciplinary nature, discussed in the following subsections. Thus, the following sections present an overview of the primary debates built around feedback in disciplines such as psycho-pedagogy and educational neuroscience.

The psycho-pedagogy of feedback

For over a century, psychologists have entrained the idea that feedback improves performance, leaving little room for contrasting perspectives to be considered since “the positive effect of feedback on performance has become one of the most accepted principles in psychology” (Pritchard, Jones, Roth, Stuebing, & Ekeberg, 1988, p. 338).

The long-standing psychological view is that “the feedback mechanism allows for stimuli and responses to become associated via automatic reinforcement mechanisms” (Haddara & Rahnev, 2022, p. 259). Thorndike’s “Law of Effect” Theory (1927) is considered the seminal in understanding the role of feedback in learning. In addition, Skinner and behaviourism reinforced the idea that feedback encompasses a combination of positive and negative reinforcements, views deployed by many learning organizations across academia and industries (William, 2018). These views shaped the formative feedback, articulated for the first time by Benjamin Bloom (1968) (Guskey, 2018), which proposes specific strategies for delivering regular feedback to improve students’ learning achievements.

During the 1980s, the constructivist views transformed the understanding of feedback as a behavioural shaper toward feedback being regarded as instrumental support to providing the students with the information to process and construct knowledge. This marked the moot point when feedback softens its punishment repertoire, as it starts being also regarded as an opportunity for learning (Sadler, 1989).

The 90s brought a feedback revival with interdisciplinary learning cognitive theories, such as Butler & Winne (1995) and Kluger & DeNisi (1996). These shaped the new psychological and educational landscape around feedback and its potential to encourage learning instead of inhibiting students’ behaviours towards improving their learning experiences and, ultimately, their academic performance (Haddara & Rahnev, 2022). However, soon after, Black & William (1998) revolutionized the field of feedback by reinforcing the critical role of formative feedback and the significant roles that the student-learner and the teacher-formative instructor have within this process (Panadero, Andrade, & Brookhart, 2018; Panadero, Broadbent, Boud, & Lodge, 2019). Finally, during the last decades, among the most relevant theories, self-regulated learning (Panadero

et al., 2019) and the control-value theory of achievement emotions (Goetz, Lipnevich, Krannich, & Gogol, 2018) contributed to the argument around feedback as a continuous reflective evaluation process and support for learning.

In contrast to these feedback models, they prioritize the feedback being done to the learner, a newly emerging perspective shifted from feedback as a piece of occasional information toward becoming a learner-centric process. This new approach aims to enable learners to engage in the feedback process as passive receivers and as a valuable source of feedback, peer feedback or self-feedback, exercising their agency in responding to it proactively, actively or reactively (Panadero et al., 2019; Winstone et al., 2022).

Over the last decade, feedback slowly shifted from being an occasional piece of information to becoming a full-blown reflective process encouraging active and iterative student engagement (Henderson, Phillips, Ryan, Boud, Dawson, Molloy, & Mahoney 2019b; Winstone et al., 2022).

Although there are well over ten theories and models that showcase the feedback process, which supports researchers and practitioners’ argument for effective and timely feedback that encourage the process of learning and improve learners’ performance, this paper acknowledges the importance of interactive feedback. Thus, it prioritizes in its critical argument Lipnevich & Panadero’s model (2021), which presents feedback as a complex, multidimensional process, where peers, automated, teachers formulate feedback, or managers go through the learner’s different layers of cognitive, affective, and behavioural layers of assessment, which act as the foundation of the learner’s behavioural processing and ultimately their performance.

Although Panadero and Lipnevich’s interactive feedback model (2021) is still learner-centric, it emphasizes the importance of learners’ receptivity to feedback. It focuses on how the learners understand feedback and how they feel about it, and how they engage with it. They also suggest that externally formulated feedback will be internalized into self-feedback, which is further operationalized as behaviour so that learners become motivated to lead the improvement of their learning process and their performance (Nicol, 2021; Panadero et al., 2019).

Overall, the psycho-pedagogical field provided valuable theoretical models that portray feedback as a complex web of emotions and cognitive processes, mostly learner-centric, influenced by the formative leaders as the sources of feedback and other contextual elements.

Therefore, in order to better understand feedback and formulate effective strategies, it is critical to

acknowledge its multidimensionality and thus consider new, critical perspectives about feedback proposed by the newly emergent discipline of educational neuroscience, which informs on the brain's reactions to feedback, which is the foundation of our cognitive, affective and behavioural processes.

The educational neuroscience of feedback

Educational neuroscience is a new emergent interdisciplinary field that focuses on measuring the link between learners' cognitive processes and brain activity during the learning process. Educational neuroscientists rely on eye-tracking, electroencephalogram (EEG) and psycholinguistic measures to better understand how feedback impacts our brain's cognitive function, which leads to a positive and effective learning outcome. Precisely, eye-tracking procedures capture the importance the learner gives to different feedback elements caught in gazing; EEG waves measure the intensity of the brain's electrical activity in response to different feedback elements. Psycholinguistics show that when the feedback is limited to the unfortunately common dichotomous "yes/no", "right/wrong", short sentences such as "that's not correct" or the Key Performance Indicator score or simply the assessment marks, the feedback does nothing more than to demotivate the learner because this feedback reinforces the learner's mistakes instead of becoming an opportunity to correct potential learning errors, which is crucial in the process of learning.

In neuroscience, scientists observed that fear and anger associated with feedback activate the amygdala, suggesting that the amygdala is sensitive to the goal relevance (Adams, Gordon, Baird, Ambady, & Kleck, 2003). The brain's operating principle is "to minimize danger, maximize reward" and thus protect us. Consequently, through its amygdala, the brain transforms the feedback into emotions. Therefore, when feedback information is perceived as a threat to our status (i.e. social standing), certainty (i.e. predictability and opportunity to plan), autonomy (i.e. sense of control and independence in decision making), relatedness (i.e. sense of safety) and fairness (i.e. sense of what is right and acceptable), the brain reaction is a "fight or flight" response to protect us from this threat, which translates into reduced creativity, decision-making, and analytical skills thinking (Rock, 2008). Furthermore, this perception of being threatened is enhanced when the learner is expected to receive positive, judgmental, and corrective feedback. In conclusion, this contradiction in expectations between teacher and student pushes the learners into an emotional spiral. Therefore, they experience a significant drop in dopamine to being delusional, as some cannot accept being wrong.

Therefore, in order to ensure that feedback encourages learning and high-level performance, feedback must be fair and empowering so learners feel motivated to engage rather than be threatened. So, when formulating your feedback, reflect upon the potential impact on learners' status, autonomy, certainty, relatedness and fairness.

Feedback literacy

Most of the literature and empirical evidence about feedback is learner-centric and prioritizes its efficiency in encouraging learning or its pitfalls in achieving this aim. Only recently, scholars raised the issue of feedback literacy from the learners' and teachers' or formative leaders' perspectives. This view transforms feedback from being an occasional comment provided by teachers to their students into a process to improve and encourage the personal and professional development of all stakeholders involved, teachers, students, managers and employees (Boud & Dawson, 2021; Henderson et al., 2019b).

If feedback is a process, then it is critical to pay attention to how it is operationalized so that all parties involved can understand it and engage with it. Specifically, the organization of workshops on student-teacher and manager-employee feedback literacy is needed at the beginning of every teaching module or organizational project so that everyone's performance expectations are aligned with the overall organizational aim. In addition, this approach addresses the risk of underperforming and miscommunication, which is exceptionally high in a cross-cultural or super-diverse academic environment like the British one, thus increasing the assessment criteria' transparency and encouraging a collaborative learning experience (Boud & Dawson, 2021).

As key contributors to the feedback literacy agenda, a handful of scholars, amongst which Sutton (2012), Carless & Boud (2018); Molloy, Boud, & Henderson (2020) and Winstone, Balloo, & Carless (2020) contributed to feedback scholarship by emphasizing that teachers' feedback literacy is as critical as that of students'. Specifically, Carless & Winstone's (2020) feedback literacy model proposes three dimensions: design (i.e. the design and the deployment of feedback processes), relational (i.e. accountability in delivering and engaging with feedback) and programmatic (i.e. module and assignments design and implementation) model. However, despite its valuable contribution to this new knowledge stream, this model fails to consider essential structural features such as teachers' role in formulating and implementing the feedback. This raises questions of conflict of interest as the teacher assumes a dual and somewhat contradicting role as formative leader and assessor, sharing accountability in the learner's performance.

However, empirical evidence suggests that despite evidence of situational high-level feedback literacy amongst students and teachers, often there is a misalignment between literacy and practices. This gap is partially justified by the fact that policies and academic or organizational culture might discourage or block sophisticated feedback practices (Henderson et al. 2019b).

Overall, this paper adopts Carless & Boud's perspective (2018) and promotes feedback literacy as "the understandings, capacities and dispositions needed to make sense of information and use it to enhance work or learning strategies" (p. 1316). This perspective suits this paper's reflective practice approach by presenting the feedback as an ongoing process of development that includes curricula-seeking information on learning performance, processing feedback information and acting upon feedback information (Malecka, Bound & Carless, 2020).

This theoretical and empirical framework demonstrates that feedback is a critical assessment process which aims at and should encourage learning and enable high-level academic and organizational performance for learners and teachers or other formative leaders. However, in order to achieve its intended aim, the sources and the recipients of feedback need to be literate and thus understand it and, more importantly, understand it as a reward instead of a punishment, so they can positively engage with learning.

The following section discusses feedback practices in a cross-cultural context.

REFLECTIVE LESSONS FROM FEEDBACK PRACTICES

These reflective accounts are extracted from practice-based teaching experiences in a cross-cultural context in a UK university and a Romanian university and career mentorship practices. There are tremendous socio-cultural and economic differences between the two contexts (see Hofstede's study for a comparative view) and the ranking between the two universities (see World Ranking).

Considering the theoretical and empirical framework discussed above and all these cross-cultural contextual differences, feedback has been experienced and practiced in the Romanian academic context as a teaching tool, treatment, command, and costly commodity. Sometimes, feedback as a dialogue or coaching has been encouraged by students. This approach was informally encouraged since it aligned with the hierarchical cultural approach, where students look up to their empowered teachers. On the other hand, in the UK context, feedback has been practiced as a learner tool, coaching, dialogue, and feedforward,

which aligns with their flatter organizational structure, where students are critical financial sources for British universities, as students and as alumni.

Feedback as a teacher's or a learner's assessment tool or a costly commodity

Many professors teach way over 20 hrs./week in many Romanian universities for prolonged periods. Like many public universities from emerging countries, feedback literacy is a topic of theoretical debate, completely ignored outside the teaching certification. Primarily used as a corrective summative assessment measure, it is not uncommon for teachers to deliver mainly summative feedback as final module marks and for students to be asked for semestrial feedback directed to their teachers, often without knowledge or training on the topic.

Reasoning with the perspective of Pardo et al. (2017), often teachers in public universities from developing countries experience "significant workload barriers (...) that impede their capacity to provide timely and meaningful feedback" even though they "are under increasing pressure to dedicate resources and time for providing feedback". Similarly, Cheng (2017) emphasizes that "feedback on writing is a time-consuming job and [...] it can be problematic for teachers to provide feedback to students regularly". Within this context, formative peer feedback is encouraged during group-exercise or summative when the conclusions and solutions to the group exercise are presented.

Too often, unfortunately, students share operationalizing feedback as a retrospective, emotional, judgmental and corrective process of how specific teachers have delivered their classes and the degree to which their expectations (grades) were met or not. Unfortunately, however, none of the students taking part in the bespoke feedback workshops questioned their feedback literacy or the need for it or took into account the stated objectives of their courses or reflected on their accountability for their learning outcome. Instead, they often shared operationalizing feedback as a retrospective subjective and emotional recollection of memories and how their grade-based expectations were met. Furthermore, most of these testimonies were teacher-centric, with almost no trace of shared accountability. Instead, most preferred to refer to their learning almost as an out-of-body experience, with little or no reference to their role and responsibility for the final grade.

Feedback was also a teacher's or learner's assessment tool within this context. It encouraged the source of feedback to act independently, with no intention to seek learners-teachers' collaboration. Therefore, each of these subjects interpreted and delivered their feedback mainly

guided by evaluation criteria designed by themselves, which embedded a high level of subjective interpretation. For example, the teacher provided summative feedback as grades, accompanied by little if any group or individual formative improvement solutions. The formative feedback was usually generic, group and competence-specific to encourage critical thinking, communication and analytical skills. However, this formative feedback was considered by many students unnecessary since most of their exams were multiple choice questions, which tested their short-term memory instead of critical thinking or communication skills, which were prioritized to prepare for a sustainable professional career.

Although questionable, suitable to the academic organizational culture and the limited resources available, spinning the whole system into survival mode, this feedback approach sometimes created tensions between students and teachers. Furthermore, it gave the false impression of empowerment, whilst failing to be timely or efficient since it is often done to correct, not to encourage the learning and high-level performance, sometimes portrayed as unnecessary pressure on students.

Feedback as a command

There were cases when feedback was delivered as a command through automated channels. This type of feedback, despite being well intended, undermined the learner's control over their learning process and performance since there was limited opportunity for dialogue. Empirical evidence suggests that video feedback falls into this category because it limits the opportunity for clarification and increases the risk of being lost in cross-cultural translation, which might enhance cultural asymmetries and thus delay learning (Rasi and Vuojärvi, 2018). In addition, it was not uncommon that this "feedback (can) exercised power over and influence [language] learners' identity representations", leaving students "experience(ing) pressures, control and power from automatic feedback" (Zaini, 2018: 136).

This form of feedback is not necessarily context-specific. Still, it is used across the different cultural landscapes due to its efficiency and precisely when events such as the Covid pandemic limit face-to-face interactions. Also, computer-assisted feedback, such as the automatic marking and the feedback using rubrics, are commonly used to ease teachers' working load and ensure that students receive some formative feedback to support the delivery of their semestrial assignments or exams.

Feedback as coaching, dialogue or treatment

Since most British universities encourage a collaborative learning environment, treating their teachers and students as valuable stakeholders in

the educational outcome and the university's overall performance, feedback as coaching, dialogue and sometimes treatment are standard practices. However, although the teachers have eight training hours on feedback literacy at the beginning of every teaching semester and website assisted guidance, the engagement to ensure students' feedback literacy remains limited, and it is the responsibility of teachers to decide if and how they want to engage with it.

However, the formative feedback was often prioritized when feedback was practiced as a treatment, a form of educational student-sitting. Specifically, students were invited to participate in workshops and guided through first-hand, bespoke formative feedback to prepare for their assignments, projects and exams. The teacher assumed most of the responsibility of delivering a learning experience which would result in students' positive engagement and good performance outcomes.

Research has proven that this type of feedback positively impacts students' academic performance, particularly during online classes, when students lack peer support and thus might need more support and guidance in their learning journeys (Hattie & Timperley, 2007). Therefore, according to Truskowski & VanderMolen's study (2017), "immediate and specific feedback by the course instructor can dramatically affect the quality of student learning".

Feedback was sometimes delivered as coaching. The teacher sought to motivate and empower the students through praise and encouragement to take action, thus pursuing personal and academic development and their overall performance. This type of feedback was used as part of the formative and summative feedback, and it "made students feel personally committed" (Filius, Kleijn, Uijl, Prins, van Rijen, & Grobbee, 2018) and "motivated the learner to train longer" (Truskowski & VanderMolen, 2017).

There were times when the feedback was delivered as a dialogue, a bidirectional exchange of improvement solutions, "a continuing dialogue between the feedback provider and the feedback receiver" (Filius et al., 2018), where the learner-teacher interaction was prioritized as well as the conversational engagement about feedback. This type of feedback was operationalized in grades being assigned after the feedback dialogue when learners and teachers had the opportunity to justify their expectations. This approach encouraged collaborative feedback, assessment, and shared accountability (Thomas, West, & Borup, 2017).

Not feedback, but feedforward: collaborative, empowering and effective learning

Hattie and Timperley (2007) proposed the term feedforward to address the pitfalls of feedback,

suggesting that: “Effective feedback must answer three major questions... Where am I going? (What are the goals?), How am I going? (What progress is being made toward the goal?) and Where to next? (What activities need to be undertaken to make better progress?). These questions correspond to feed up, feedback, and feedforward notions.” (Hattie Timperley 2007, 86).

In comparison with feedback, feedforward was deployed as a better assessment and learning regulating tool compared to feedback which they regarded as an information delivery tool which disregards learners’ literacy and thus their understanding of what this information means and how to engage with it to improve their performance (Winstone & Carless 2020; Winstone, Balloo, & Carless, 2020).

Feedforward prioritized the goal’s fulfilment and the outcome’s quality by using formative workshops organized to mark specific project milestones. Therefore instead of looking backwards and reinforcing the wrongdoing, the corrections were addressed as alternative solutions to particular tasks.

For example, in highly competitive academic environments like the UK, where tuition fees are not always the most budget-friendly and the pressure to perform becomes the responsibility of multiple stakeholders, from students to teachers and university leaders, feedforward is encouraged. Specifically, whilst teaching business communication technologies to classes of diverse students from over 15 countries, in the beginning, feedforward can be easily associated with academic babysitting. However, although the bespoke, one-to-one approach to understanding the assignment was tiring, it provided a positive, collaborative learning environment where students felt encouraged, supported and confident about the quality of their education and their performance, and it resulted in high students’ satisfaction which further contributes to improving the visibility and the ranking of the university. All these can translate into funds, scholarships and generous donations for the university and its students.

The practice of feedforward has been implemented considering the following steps:

1. The teacher discussed the module’s aim reflected in assessments and evaluation criteria during the feedforward literacy workshop. The formative leader used activities which encouraged learners to grade different examples of assignments to ensure grading transparency and learners’ understanding of the required standards (Wimshurst and Manning, 2013).

2. Reasoning with Walker and Hobson’s (2014) strategy, this workshop on assessment criteria was followed by an exemplar grading activity, where a combination of teacher and self-feedforward approaches was used to strengthen students’

performance and manage the expectations of the module summative assignment. In this case, the teacher used different feedforward strategies, mostly made available by the university and which are also described in other studies, including video (Henderson & Phillips, 2015), audio, using Panopto (Morris & Chikwa, 2016), and checklists (Wakefield, Adie, Pitt, & Owens, 2014) and rubrics.

Students and teachers tested and strengthened their feedback literacy and aligned their learning and performance expectations thanks to these feedback workshops.

Using this strategy, the teacher and learner focus on future improvements, avoiding emotionally charged discussions about past mistakes. Feedforward shifts away from unfocused ideas encompassed by feedback to encourage specific actions to improve learning and overall performance, empowering the learners to take action towards achieving personal and professional development.

Instead of insisting on how the students have been less than resourceful in the past, by using questionable reference sources in their argumentative assignments (feedback) and thus critiquing their performance, one may instead give a solution or guide them using nested questions towards discovering the best solutions (feedforward). Feedforward enables the teacher to assess and adjust the teaching to the learners’ cognitive and affective characteristics. This allows for a more inclusive and positive collaboration, as all the parties involved have the opportunity to contextualize their expectations and actively participate in the learning process and enhance feedforward literacy across the board.

Feedforward also offers the opportunity for collaborative and emotionally balanced interactions due to its non-judgmental, inclusive approach. Practicing feedforward helps the learners and teachers or formative leaders focus on identifying solutions to improve their academic performance. Thus, it helps us refocus our energy and knowledge by looking forward instead of backwards.

Although feedback may be here to stay, and thus it is critical to revisit and reformulate its strategies to ensure that it encourages quality learning, however, its pitfalls should be critically assessed and addressed whilst also creating alternative formative tools, such as feedforward, which can be valuable for the learning organization (Sadler, Reimann, & Sambell, 2022).

CONCLUSIONS

Feedback should not be treated as an academic or organizational ritual, a one-size-fits-all exercise to showcase power asymmetries or reinforce a hierarchy. It is, instead, reasoning with Tom Stafford's (2018) argument that feedback should allow us "to find a purpose and develop more complex responses to the environment." Therefore, to encourage instead of inhibiting learning by supporting the learners in their lifelong learning journeys, formative leaders, teachers, and managers alike need to shift away from corrective, diachronous feedback toward formulating timely, positive solutions. Such solutions equally improve the process and outcome of learning, specifically the learners and the organization's overall performance.

Furthermore, the situational practices used to showcase feedback are contextual and influenced by various factors. Therefore, this paper touched upon culture, resources, feedback literacy, and shared accountability. Feedback is contextual, operationalized as a teacher or learner's assessment tool, a costly commodity, a dialogue, coaching, treatment and it can even be transformed into feedforward as a novel assessment tool which prioritizes the empowerment and encourages learning through reward and practises, proposing solutions, instead of being corrective and judgemental and past-oriented.

Without any doubt, feedback remains a critical assessment tool. But the way it is practised needs to be re-evaluated to steer away from emphasizing wrongdoings without offering the opportunity for redemptions and inducing in our brain a "fight or flight" adverse reaction and defensive social behaviour, which ultimately inhibits learning and performance for all parties involved, including students, employees, employers and managers.

"Feedback is the key to personal growth and improvement, and it can fix problems that are otherwise costly" for the learner and the broader organization. Still, to be efficient and effective, it should be a conversation about how to improve instead of what is wrong, to replace the risk of feeling threatened with the feeling of being rewarded. First, learners and teachers need to be literate in what it means, its role, operational practices and its impact. Learning can be effective and timely and can drive high-level performance if feedback becomes a collaborative and empowering dialogue between all parties involved, supporting understanding of the objectives and criteria that guide it. It is operationalized as a process of continuous and transparent personal, academic and professional development. For feedback to encourage learning and performance, all its interdisciplinary elements need to be considered

and understood, and practice-based examples shared by researchers and practitioners across disciplinary silos, cultural context, and professional engagements.

Although this paper offers a timely and context-bound perspective of feedback, the researcher hopes that this paper's interdisciplinary views and contextual practices reinforce the importance of reflectivity, interdisciplinary and theory-practice dialogues to advance the understanding of feedback practices towards encouraging learning and learners' performance and which is always intended, but rarely achieved.

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