

# We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

Open access books available

186,000

International authors and editors

200M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index  
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?  
Contact [book.department@intechopen.com](mailto:book.department@intechopen.com)

Numbers displayed above are based on latest data collected.  
For more information visit [www.intechopen.com](http://www.intechopen.com)



# Feedback and Feedforward as a Dialogic Communication in the Learning Environment

*Halliki Harro-Loit*

## Abstract

Feedback concept in education is broad and covers several functionalities. The aim of this essay is to open up feedback and feed-forward concept as a process of dialogic communication both on individual level and in (educational) organization. While feedback provides information retrospectively (how has it been?), feed-forward would guide the future progress. While approaching the feedback from the point of view of dialogic communication, this study proposes different aspects of the feedback addressee and feedback provider could negotiate in order to make the feedback satisfying for both sides: number of aspects, time, generalization, and—whose task is to “interpret” feedback to feed-forward. The essay opens up the complexity of feedback and feed-forward asking/giving/receiving from the point of view of interpersonal as well as organizational communication. While approaching feedback giving and receiving as interpersonal communication it might include “noise”—unintended and sometimes spontaneous messages. The essay includes illustrative examples from the daily communication practice concerning the complexity of giving analytical descriptive feedback. On organizational level, the essay suggests to consider carefully the purpose of the feedback, the data collection methods and how the organization can make use of the data.

**Keywords:** learning process, feedback, feed-forward, communication, learning environment

## 1. Introduction

In cybernetics, learning processes, and communication, feedback is essential. Often, it is related to the (formative) assessment (e.g., [1, 10]) where “the power of formative feedback lies in its double-barreled approach, addressing both cognitive and motivational factors at the same time” ([2], 2). The feedback concept in education is broad and covers several functionalities: e.g., diagnostic feedback ([3], 769), immediate corrective feedback provided by various information computer platforms and programs [4], critical and constructive feedback (e.g., [5]), verbal and nonverbal feedback, etc. Generally a feedback should feed a learner learning forward and should help to identify the next steps in the learning journey [6]. In the context of this essay, it is important to distinguish feedback and feedforward. While feedback provides information retrospectively (*how has it been?*), feedforward would guide the future progress (e.g., [7–11]).

An important approach concerning feedback is its effectiveness (e.g., [3, 12]). For example ([2], 5) proposes four feedback efficiency- related strategies that might vary: timing (when given how often), amount (how many points made, how much about each point), mode (oral, written, visual/demonstration), and audience (individual, group/class). She (like many other authors, e.g., [5]) also provides recommendations not to judge but to describe, avoid personal comments, focus on the work itself and the process the students used to do the work, use positive comments that describe what is well done, and focus on the students' own past performance. These are widely recognized basic recommendations for efficient and constructive feedback.

Another approach [3, 13–15] focuses on the importance of *dialogic approach*. While Yang and Carless [15] point out that “Our emphasis on dialogue is an explicit attempt to circumvent the limitations of one-way transmission of feedback which frequently arises from the dominant structural constraint of written comments on end of course assignments,” this essay focuses on dialogic feedback as a process of negotiations on the aim, focus, and amount of feedback and feedforward. Ajjawi and Boud [16] point out that “Understanding feedback as information transmission has dominated most of the literature (until recently), where research has focused on the content and delivery of the feedback, that is what the teacher does. Feedback as ‘telling’, which positions the learner as a passive recipient, is problematic, as the act of telling does nothing to ensure the learner has read or listened to the feedback” ([16], 253). Skovholt [17] shows by using conversational analysis (CA) that during student-teacher interaction, the teacher is mostly active (holding initiative) and sets her agenda, while the student is rather in passive role. Hence, in education-related literature on feedback, the focus has been mostly put on giving efficient feedback, while *perception* is central to skillful interaction ([18], 25).

The main aim of this essay is to open up feedback and feedforward concept as a process of *dialogic communication* both in individual and (educational) organization levels. Considering feedback and feedforward as a dialogic communication, we can ask if the feedback starts with *the addressee determining the focus*? Is the skill of asking appropriate feedback one important aspect of feedback literacy? What are the problems concerning negotiations about the object, amount, and timing of feedback? Whose task is to “translate” feedback into feedforward? In addition, feedback never appears to be neutral—it values some aspects, while the others remain outshined. It is often hard to detect if the feedback actually measures, reflects, and supports the aims and values expected; hence, “negotiations” might not necessarily end with the first phase of feedback process.

These questions direct us to the final question: while offering feedback is a demanding communication—it necessitates perusing aims, agreement between the parties, time, expertise, and communication skills—receiving feedback also demands special literacy. Hence, it is important to point out that if feedback is handled from the point of view of dialogic communication, it demands special feedback-feedforward literacy where the teacher and student (addressee of the feedback) are both active and equipped with good communication skills and knowledgeable about efficient feedback.

While feedback is a social practice in which the management of relationships represents a source of emotions influencing the learners' ways of studying ([15], 289), good interpersonal communication or failure during the feedback (forward) process might either establish or destroy relations. Thus, in the discourse of interpersonal communication, much attention is being paid to the techniques of providing constructive feedback via various reinforcement techniques (e.g., “When someone does something especially well, give them positive feedback, and relate it specifically to the action or behavior that was performed.”, [19], 6).

Educational organizations also need and use different feedback systems in order to evaluate their performance and settle further aims, although the vast number of performance indicators [20] might cause a lot of noise if the aim and the focus of the feedback remain vague. But in both cases, the common problem that becomes visible, if the feedback is approached as a dialogic communication, is that the aim and the object focus and timing of the feedback and feedforward should be negotiated.

Illustrative examples in this essay are collected from my various teaching experiences.

## **2. Negotiating about the aim and the object of the feedback**

Why is it important for the provider and the recipient of feedback (and feedforward) to agree upon the purpose and object of the feedback? As to the communication viewpoint, it is essential that the volume and degree of substantiality would be equally clear for both parties and to consider their current needs. Carless and Boud [21] name that kind of talk as meta-dialog: "... there is a need for meta-dialogues between teachers and students about feedback processes. Meta-dialogues discuss processes and strategies of assessment and feedback rather than the specifics of a particular piece of work."

From the point of view of dialogic communication, the first intricacy upon creating a conscious feedback system would be establishing and agreeing about the aim, object, and amount (content) of feedback. A faculty member of the University of Tartu provided an elaborate feedback for a student's essay on journalism history. The academician spent a lot of time in a belief she was doing a good thing, as for years the internal communication in the university had suggested that the faculty members provide students with too short and shallow feedback. In the particular case, the student was annoyed because he expected just the grade.

I have permanently had the same dilemma while feedbacking the students' works (within higher education)—how much would it be optimal for the study process to provide feedback and feedforward? Would the student be able to admit the complexity of the feedback, addressing the content, language, formatting, structure, and the used data validity? While it seems to be obvious that the aim of the feedback needs to be established before providing it, teachers and students quite often forget that this needs a special time in meta-dialogs (communication).

In some cases, the purpose of the feedback can be normatively determined, e.g., in the case of tutoring, the criteria for "learning outcomes" can be assessed. A practical problem arises when the outcomes have been worded too generally or as "fully acquired skills." In the latter cases, the provider needs to make an effort to allot the feedback into reasonably small and cognizable constituent skills for the learner. For example, for a test in mathematics, the teachers' feedback to the student feedforward often stands, "Exercise calculating more!", as the learning outcome is specified as "Can calculate." For a student, "exercising to calculate" can be a too general and overwhelming task, as it includes training several constituent skills. The more explicit feedforward might be "to exercise the written method of division." A more precise analysis of the student's mistakes may enable to focus the feedforward more precisely, "Be cautious in putting down the numbers in written division – write only one number per grid paper square!"

In education organizations, the future directives have usually been formulating development plans. However, these plans have been laid down as if horizons are glimmering far away. The organization's staff still needs particular vision for a closer timeline—in a year or 5 years of perspective.



Altogether, for determining the aim, objective, and amount of feedback and feedforward, the provider and the recipient need to agree upon the following:

1. Would the feedback and feedforward cover few or many aspects?
2. What would be the final object of the feedback and feedforward?
3. The degree of generalization—how much effort lies in interpreting the feedback? Who should “translate” feedback into feedforward?
4. Extent of the feedforward—how much effort is expected from the recipient in the process of implementing it?

As it was said before efficient feedback needs timing, hence, feedback needs to be scheduled, but from the point of view of communication, the main problems are linked to fixed feedback systems in educational organizations that most often are related to the feedback the teacher gets from students. For instance, there is a difference for a teacher to receive feedback from the students either during the course—to enable and implement instant changes—or after the course. The latter’s retrospective nature enables to introduce some changes the next time, but the students vary year by year. As another example for a teacher starting his career, it is important to get collegial feedback and feedforward both before the session and in situations when some activities need to be adjusted.

Thus, the purpose of feedback and feedforward may seemingly be obvious, but, in practice, we have to pay sufficient attention to the time we need for meta-dialog about the objects and volume of feedback and feedforward, its explicitness, and the period of time about what and when the feedback is provided. Merely the considerations of the feedback provider would not suffice—the needs of the recipient must equally be regarded.

### **3. Asking for feedback and feedforward**

Ideally, feedback could start from questions asked by the recipient. Much of the disappointment between the feedback providers and recipients originates from discrepant expectations and perceptions of good and relevant feedback. Therewhile in practice, the recipients may not know what he actually does not know. In other words, formulating the question for feedback necessitates a good self-reflection, an ability to assess feedback provider’s competence, and, after all, a habit to request for feedback.

More often in my educator’s practice, I have been employing a method, asking the students to formulate about what they would like to get feedback. I explain them that if they ask “How was my test?”, I’ll respond in the same degree of generality: “Well”, “Not satisfactory”, or similar. My intention of employing this method is to develop students’ skill to devise what skills and knowledge they elaborated while executing the exercises. Also, I am aiming to provide as much feedback as much the students are willing to “translate” it into feedforward. It is likely that the ability to ask for feedback and feedforward would need systematic training and be shaped out gradually.

How can an (educational) organization obtain feedback for its operations? Ideally, the school staff might formulate the question, in which they would like to have feedback and feedforward. From there on, they put up a methodology on how to get the requested feedback. What data needs to be gathered? How to get these

data? Who and how we might analyze these? How to interpret the results and to “translate” them into future plans?

In an organizational management, there are very many feedback indicators (e.g., [20]). Thus, feedback by external observers can be random, singling out some features and neglecting others. Therefore, in sophisticated systems, the feedback recipient needs to balance traditional and externally provided feedback indicators. I would like to point out that if the educational organizations avoid actively formulating feedback questions about themselves, the declared aims and evaluations fed back often collide. For instance, the curricula and the political rhetoric primarily declare child-centeredness, but the public evaluative feedback focuses on ratings upon state examinations’ results by schools. Analysis (feedback) on the “health” and development of the system actually means permanent scanning of the “dark corners,” also detecting and critically apprehending new patterns.

Grasping initiative while asking for feedback provides an advantage—the recipient can control the vision of what is noticed upon his work and also push it to the direction, in which he wants to advance.

Along with formulating the feedback questions, also the feedback asking a format can be tangled. Format, or genre, simplifies communication and reduces confusion about hidden assumptions. Evaluation interview is a prevalent format, or genre, for feedback and feedforward. During this evaluation interview, the conversational partners take time to listen to each other. The interview can be prepared. Having listened to people working in various spheres, I claim this demanding genre for managers to be misemployed as an enabler of productive feedback and feedforward. Organizations (management, focus groups) may need explicit time and place for evaluation interviews. Group interviews probably take more time, and the preparation is more demanding, but, for the educational institution or its owner, such regular feedback genre, after years of rehearsing, can serve as an event to discuss corporate values and principles.

Standardized questionnaire is another common format for feedback. Employing questionnaires is intricate, as here stands the rule—you’ll get what you ask. In other words, wrongly formulated question to a wrong addressee would rather produce noise.

#### **4. Noise in feedback**

In the interpersonal communication, you can read a colleague saying “Your class is awful!” not providing feedback but expressing his anxiety. Besides, the colleague produces judgmental feedback about a situation, in which the recipient cannot do anything. It sounds like a reprimand by a teacher to the parent of a student, “K. is disturbing the lesson!”. The parent could reply in the same mood, “Shall I come to the lesson to sit next to my child?”. The teacher might rather ask his colleagues, “What methods do you use to keep the students busy?”. Therefore, it is important to make difference between feedback and issue propounding.

Noise can also be produced by anonymous feedback. In the case of anonymous feedback, the interrelationship and context between the provider and the recipient is missing. It is very common to ask anonymous feedback from students about finished courses. With regard to translating feedback into feedforward, this contains several problems. The anonymous feedback is hard to interpret due to missing context. Inevitably, the student’s relationship with the teacher and the course is personal. I have met several teachers who along with constructive feedback have received some adverse statements, which tend to irrationally haunt years later. Over all, anonymity provides no motivation to feedback in quality manner. However, all

the mentioned drawbacks do not fully compromise collecting retrospective evaluations, but it cannot be translated into feedforward. Also anonymous questioning may be relevant, but it does not support interpersonal relations.

Relations also suffer from superficial feedback. In daily work, people experience a wide range of features, but the feedback they get about are some marginal nuances. For instance, a teacher had prepared several exercises with diverse ruggedness for students with diverse studying pace. He improved the exercises, based on the feedback from the students. Now, he would need inspiring, analytical, and approving feedback, noticing that he has done much beyond the regular job. During the evaluation interview, the manager mainly asks about the teacher's mid-career training needs and praises for good results in exams. The manager based on easy-access data and has no knowledge about the teacher's innovative work. By analyzing how much and what kind of feedback the managers give, we can indirectly detect how much they have delved into subordinates' job. In fact, the provided feedback reflects the manager's professional competence.

## **5. "Translation" of feedback into feedforward?**

In translating feedback into feedforward, we need to address two major considerations. Firstly, we need to establish if the results can be improved with the help of feedback. This underlines the importance of the time of offering feedback. For instance, when students provide feedback to the teacher, it makes much sense whether the feedback is given during the course or after it. In the first case, the teacher can make improvements to the ongoing learning process; hence, the feedback that is given to the addressee during the process could be turned into feedforward, while the feedback that has been given in the end of a course would not be easy to be "translated."

It is also important to establish who "translates" and how to "translate" feedback into feedforward. For example, grading at schools is a typical sort of feedback, which points out the errors but establishes how to avoid these mistakes with the subject of grading. The problem is that the feedback on what has been achieved needs special effort to be "translated" into "what should be the next steps" message. In the case of an active learner (addressee), it might be useful if he/she asks actively about the next steps.

## **6. Analytical descriptive feedback instead of compliments**

As it was said before, feedback is a tool for creating (or destroying) relations. To create and keep trustful relations, one might have to learn to provide neutral descriptive feedback. It is probably easier and more convenient to give general positive commending judgment. However, positive descriptive feedback presupposes the qualities of an observant noticer and analyst. For instance, the provider of neutral descriptive feedback instead of saying, "A great lesson! Enjoyable and interesting!" would say something like "I saw that students in your lesson were studying along! At least four-five students asked some further questions and your answers provided also me with new facts!"

The effect of descriptive neutral feedback appears more splendid when negative message needs to be passed on. For instance, a small student fidgets and chats. A critical and judgmental feedforward would be "Don't disturb the lesson!". The descriptive and neutral way to provide feedforward would be something like "I see that you have hard time to listen to my talk"—a pause—and then "What could help

you to concentrate?”. This example illustrates also one more golden rule for feedback and feedforward—before giving feedback and judgments, think about what you do not know and what kind of wrong presumptions you may have. Maybe the child seemingly disturbing the lesson has an acute question on the topic and simply cannot get a chance to say it or is shy.

## **7. Summary: checklist of critical questions concerning feedback and feedforward**

In analyzing feedback and feedforward from the aspect of dialogic communication, we need to keep in mind that communication always produces noise: failure to understand properly, incorrect data, prejudices, data misinterpretations, inappropriate word usage, shallow or judgmental opinions, and others. It would be efficient to start from asking what the recipient needs. Would it be acknowledgment (for cheering up or promoting) or feedback convertible into feedforward? Or is it confirmation on something already known?

If an organization seeks for feedback, it is relevant to detect what kind of data is needed to be collected and how. Would these data and sources be adequate indicators to assess the desired question? What are the permanent working feedback formats (e.g., evaluation interviews), and which need additional effort to be launched?

And what will be the purpose for the gathered feedback? In many cases, organizations make much effort for getting data about their daily functioning and spend much money and time (e.g., carrying out a vast formalized survey) but cannot make use of the results.


Finally, we need to notice what kind of (often unapparent) communication of feedback and feedforward is already going on between the individuals and the organization. What kind of messages and values are forwarded through it? What kind of information would it provide about feedback providers and their competence, values, and ability to delve? Will there remain traces of the feedback procedures to be used for organization's future performance analysis? Altogether, asking organizations about their feedback- and feedforward-related behavior enables to analyze the level of communication noise and, respectively, reduce it.

### **Author details**

Halliki Harro-Loit  
University of Tartu, Tartu, Estonia

\*Address all correspondence to: [halliki.harro@ut.ee](mailto:halliki.harro@ut.ee)

### **IntechOpen**

© 2019 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. 



## References

- [1] Sadler DR. Formative assessment and the design of instructional systems. *Instructional Science*. 1989;**18**:119-144
- [2] Brookhart S. How to Give Effective Feedback to your Students. Association for Supervision and Curriculum Development (ASCD); 2008. p. 121
- [3] Youssef LS. What can regular and timely student feedback tell us about the teaching and learning processes? *Reflective Practice*. 2017;**18**(6):750-771
- [4] Chen X, Breslow L, DeBoer J. Analyzing productive learning behaviors for students using immediate corrective feedback in a blended learning environment. *Computers & Education*. 2018;**117**:59-74
- [5] Hathaway P. Giving and Receiving Feedback. Building Constructive Communication. A Fifty-minute series book. Menlo Park: CRISP Learning; 1998
- [6] Brookhart SM, Moss CM. How to give feedback. *Educational Leadership*, April. 2015;**72**(7):24-30
- [7] Carless D. Learning-oriented assessment: Conceptual bases and practical implications. *Innovations in Education and Teaching International*. 2007;**44**:57-66
- [8] Duncan N. Feed-forward': Improving students' use of tutors' comments. *Assessment & Evaluation in Higher Education*. 2007;**32**(1):271-283
- [9] Quinton S, Smallbone T. Feeding forward: Using feedback to promote student reflection and learning – A teaching model. *Innovations in Education and Teaching International*. 2010;**47**(1):125-135
- [10] Fastré GMJ, Klink MR, Sluijsmans D, Merriénboer JJG. Towards an integrated model for developing sustainable assessment skills. *Assessment and Evaluation in Higher Education*. 2013;**38**(5):611-630
- [11] Murphy K, Barry S. Feed-forward: Students gaining more from assessment via deeper engagement in video-recorded presentations. *Assessment & Evaluation in Higher Education*. 2016;**41**(2):213-227
- [12] Voerman L, Meijer PC, Korthagen F, Simons RJ. Promoting effective teacher-feedback: From theory to practice through a multiple component trajectory for professional development. *Teachers and Teaching*. 2015;**21**(8):990-1009
- [13] Nicol D. From monologue to dialogue: Improving written feedback in mass higher education. *Assessment & Evaluation in Higher Education*. 2010;**35**(5):501-517
- [14] Price M, Handley K, Millar J. Feedback: Focusing attention on engagement. *Studies in Higher Education*. 2011;**36**(8):879-896
- [15] Yang M, Carless D. The feedback triangle and the enhancement of dialogic feedback processes. *Teaching in Higher Education*. 2013;**18**(3):285-297
- [16] Ajjawi R, Boud D. Researching feedback dialogue: An interactional analysis approach. *Assessment & Evaluation in Higher Education*. 2017;**42**(2):252-265
- [17] Skovholt K. Anatomy of a teacher student feedback encounter. *Teaching and Teacher Education*. 2018;**69**:142-153
- [18] Hargie O. Skilled Interpersonal Communication. Research, Theory, Practice. London and New York: Routledge Taylor and Francis Group; 2011

[19] Alessandra T. The Art of Communicating at Work. Making Sure with Feedback eReport. 2006. Available from: <https://www.overdrive.com/media/195020/making-sure-with-feedback>

[20] Visscher AJ. In: Coe, editor. School Improvement through Performance Feedback. London and New York: Routledge, Taylor and Francis Group; 2002

[21] Carless D, Boud D. The development of student feedback literacy: Enabling uptake of feedback. *Assessment & Evaluation in Higher Education*. 2018;**43**(8):1315-1325

