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# Towards effective feedback in higher education: bridging theory and practice

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## ABSTRACT

Giving feedback is an important skill for lecturers in higher education and has a major influence on the quality of learning (Hattie & Timperley, 2007). However, it appears that, in its practical application, not all feedback is equally effective. This is a problem which applies to both students and lecturers. In working towards more effective feedback in higher education, Sadler's framework (1983, 1989, 2010) can prove a source of inspiration. Sadler posits three conditions for achieving effective and efficient feedback in classroom practice. The first condition refers to the necessity of drawing up assessment criteria and making sure students are familiar with them. The second condition posits that feedback has to include a comparison between the actual level of the product and the expected level. The last condition suggests that feedback has to include information that can help students to improve assignments. In this article we examine the various forms and conditions of feedback in more depth, with the emphasis on the practical application of theory. We also focus in detail on various aspects of how best to guide and supervise students that have been shown to have an important influence on making feedback more effective.

## INTRODUCTION

Feedback can influence learning quality and can therefore be closely related to how well students perform in higher education. Although the relationship between feedback and performance is variable, feedback has the potential to make significant difference. It helps them acquire more knowledge and a better understanding of their competencies. Feedback also helps to guide students to a higher level of performance and is ranked in the top five of strongest influences on student performance, together with areas such as a student's cognitive skills (Hattie & Jaeger, 1998; Hattie & Timperley, 2007). Feedback exerts a greater influence on student performance than doing homework/assignments, socio-economic influences (e.g. the support of friends or parents) or the reduction of class size (Hattie & Timperley, 2007). Even the expectation of receiving feedback improves learning strategies and, as a consequence, performance (Vollmeyer & Rheinberg, 2005). In an extensive review, Black and William (1998) found that feedback in primary and secondary education is effective in virtually all educational settings: content areas, knowledge and skill types and levels of education. Chickering and Gamson (1987) identified feedback as one of the core principles for effective practice in university and college teaching. Besides influencing general student performance, feedback is also a tool for encouraging students to learn in a more self-regulated way. One of the various possible objectives of the feedback process is the development of self-evaluation and - regulation skills among students (Boud,

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2000; Nicol & Macfarlane-Dick, 2006; Rushton, 2005). Thus, the importance and effectiveness of feedback is well documented.

What also emerged in research on feedback, however, was that that it is not the mere existence or absence of feedback that is important. The effectiveness of feedback will depend upon several detailed features of its quality. Not all feedback is equally effective (Hattie & Timperley, 2007; Sadler, 1989, 2010). In a study by MacLellan (2001) 130 students and 80 lecturers at the University of Strathclyde were, among other items, surveyed about their perceptions on feedback. Most students responded that feedback was only sometimes helpful. Fritz, Morris & Bjork (2000) conducted experiments to test students' memory recall and explored whether performance would be improved with feedback. It was concluded that feedback was not effective in improving learning. In an experiment of Butler (1987) different types of feedback were given to different groups of student. One group received comments. A second group were given grades. A third group were given comments and grades. These different types of feedback had different effects on performance, with the 'comments only' group performing the best and the 'grades only' group the worst.

The problem with past research on the effects of feedback was that it often lacked an extensive description of the features of effective feedback (e.g., Harris & Rosenthal, 1985; Martinez & Martinez, 1992; Whiting, Van Burgh & Render, 1995). As a result, not much was known about what constitutes good feedback. However, in recent years the focus has changed. The goal of feedback research is not only proving its effectiveness, but also to determine what the effective features of feedback are (e.g., Carroll & Goldberg, 1989; Clarke, Hattie & Timperley, 2007; Hyland, 2001; Nicol, 2010).

The aim of the present article is to bridge feedback theory and practice. That is, to give an overview of good feedback practices, based on a review of theory and research presented in the feedback literature. Also, practical implications of good feedback practice are explored. At the outset of this paper problem points related to giving and receiving feedback are investigated. Next, Sadler's framework (1983, 1989, 2010) for effective feedback is described. This framework provides several suggestions to deal with the problem points. Then, a number of additional aspects of good feedback practice are discussed. More specifically, the aspects are: the level at which feedback is given, allowing dialogue, the quantity and timing of feedback and positive feedback.

## PROBLEM POINTS RELATING TO FEEDBACK

Experience in actual teaching shows that feedback is not always equally effective and the feedback given on the student's learning process is often of poor quality (Mutch, 2003; Taras, 2006). There are a number of common problem points relating to both the giving and the receiving of feedback which negatively influence the learning effect of the feedback. These apply to both students and lecturers. However, when discussing problem points about feedback we need to bear in mind that not every problem will occur within each type of learning environment, due to the specific conditions of each individual learning environment. Depending on the elements of a learning environment some problem points will occur while others will not. Obviously, within the population of students and lectures the view on feedback and on the problem points of feedback can differ.

In general, some of these problem points refer to violations of the constructive alignment within a learning environment. Constructive alignment refers to the necessary congruence between learning goals, teaching method and evaluation method, thereby also taking into account student traits and contextual factors (Biggs, 2009). In light of the need for constructive alignment, congruency between the feedback (method) and elements within the learning environment is necessary. Firstly, to be effective and relevant, feedback must always refer to the learning goals. The ultimate goal of feedback is for students to reach the formulated learning goals. Problems with feedback can arise when this alignment between learning goals and feedback is not met. Secondly, next to the need for congruence between feedback and learning goals, student traits, such as personality traits or educational level of training, also need to be taken into account when providing feedback. That is, the effectiveness of feedback also depends on the alignment between the feedback content and the process of giving feedback (i.e., teaching activities) and the individual student (traits). As a result, a learning environment in which a specific kind of feedback is used will benefit some, but not all students. Thus, problem points can arise when feedback is not aligned with individual student traits.

In the next section overarching problem areas with feedback are discussed from the perspective of students and lecturers.

There are problems with feedback from the perspective of students and lecturers, Firstly, students often complain that lecturers give too little feedback (Gibbs & Simpson, 2004; Miller, Imrie & Cox, 1998). It appears that students consider feedback to be an important aspect in their learning process. Therefore, they would like to receive as much feedback as possible. Also, lecturers regularly give negative feedback which is focused on mistakes made. However, students also want to know what (in the assignment or exam concerned) is already at an acceptable or good level (Hyatt, 2005; Piccinin, Chislett & McCarrey, 1989). Moreover, students expect more than just a description of the mistakes they have made. They also want guidance on how they can correct those mistakes (Holmes & Smith, 2003; Roberts, 1996; Taras, 2006). Finally, students find lecturers' feedback too vague, general or superficial (Chanock, 2000; Macdonald, 1991), which is a possible result of the violation of the necessary constructive alignment (i.e., aligning feedback with learning goals) mentioned above.

Secondly, lecturers, on the other hand, notice that students often do not understand feedback or interpret the feedback differently from what was intended (Chanock, 2000; Lea & Street, 2000; MacDonald, 1991). Furthermore, students frequently do not read feedback (Hounsell, 1987, MacDonald, 1991) or fail to act on it (Gibbs & Simpson, 2004; Quinton & Smallbone, 2010). Thus, although students acknowledge the importance of feedback, often they do not actively read, interpret or use feedback. This can be explained by past experiences students have had with feedback of low quality. Often there is a vicious circle at work: students complain about the frequently low quality of feedback, whereas lecturers complain that students do not act on the feedback and so fail to use feedback as an opportunity to learn. Often lecturers conclude that students do not use feedback anyway and therefore take less trouble in giving feedback, which in turn leads to feedback of low quality. There are, however, ways of getting out of this vicious circle and one possible source of inspiration is Sadler's framework (1983, 1989, 2010), which will be explained in the next section.

## TOWARDS EFFECTIVE FEEDBACK

According to Sadler's framework (1983, 1989, 2010) there are three important conditions for achieving effective feedback. These are: (1) the student needs to have an idea of the objectives he or she has to achieve and the standard that is expected from him or her; (2) the feedback has to include a comparison between the actual level of the product/behaviour and the expected level and (3) the feedback must provide instructions/suggest actions that will enable the student to close the gap between their current performance and where they need to get to in order to meet the requirements of a task. In the following section we will examine these various conditions in more detail and look at the practical implications of these principles in the classroom.

### Condition 1: The student needs to have an idea of the objectives he or she has to achieve and the standard that is expected from him or her.

In order to fulfil this condition the lecturer needs to draw up a series of assessment criteria, which can be done individually or in collaboration with students. The lecturer also has to make sure that students are familiar with the criteria. Thus, if necessary, these criteria should be further explained, perhaps by showing students examples of assignments which optimally fulfil those criteria, by extensively describing the properties of the criteria, by discussing them with students or by developing them in collaboration with students (Herman, Aschbacher, & Winters, 1992; Orsmond, Merry & Reiling, 2002; Sadler, 1987). The purpose of this condition is therefore to familiarize students with the criteria and to allow them to gain experience in applying them.

The criteria should reflect the most important components of the assignment on which the students are going to be assessed. They should indicate the key aspects of the assignment and what students should focus on. The criteria represent the objectives to be attained in the performance of an assignment (Wiggins, 1996; Sadler, 2005). By familiarising students with criteria, they gain insight into the most relevant parts of an assignment. Furthermore, if students acquire more experience with particular criteria it is possible that they then will be able to use that understanding when assessing similar assignments. The original criteria can also be applied to these assignments as well. Becoming familiar with the criteria is the basis of learning to evaluate their own work or that of others (Gibbs & Simpson, 2004; Ramsden, 1992; Sadler, 1983). After all, students will only be in a position to (learn to) evaluate the important components of an assignment for themselves, if they know what these are. Criteria can take a variety of forms. One of these is a checklist format. A set of criteria can also take the form of a list of key questions Criteria often consist of a number of general dimensions which are then broken down into a number of smaller components which are explained in more detail (Sadler, 1985).

There are several guidelines for drawing up criteria. It is best to begin by focusing on the general dimensions and, to do so, lecturers will have to ask themselves what the student needs to know or be able to do in order to do an assignment well. For example, the lecturer can think about what a student has to demonstrate when writing a good essay. The dimensions that frequently come to mind are aspects such as for instance structure, argument and conclusion. Yet, this is not enough to create concrete feedback. Feedback based on these general dimensions, will often be too general and frequently ends up in comments like: “good structure” or “not enough argumentation”. This is too vague for students to learn from. The dimensions need to be specified in more detail. This can be done by giving a summary of the characteristics which, for each dimension, result in a good piece of work. For example, the lecturer needs to think about exactly what good argumentation or good structure actually involves. Another aspect to consider would be the question of what exactly the differences are between a good piece of work and a poor piece of work in the context of a particular dimension (Sadler 1983, 1985, 2010). As a teaching aid lecturers can offer students an example of a good and a poor implementation of a particular dimension taken from assignments from previous years and which can then be compared and contrasted. Thus a well argued essay could be shown alongside a poorly argued essay. An analysis of the two would then help students to understand the characteristics which make up a good argument (Mckeachie, 1994). Other aids in drawing up criteria include:

- looking at criteria for other assignments of a similar type;
- adopting criteria used by colleagues;
- talking to colleagues about possible criteria which could be used;
- always being ready to make improvements to the list of criteria when correcting assignments.

**Condition 2: the feedback has to include a comparison between the actual level of the product/behaviour and the expected level.**

The second condition relates to informing students clearly about their performance. In doing so the feedback giver uses the assessment criteria discussed with respect to condition 1 and reference must be made to these criteria in the feedback. Thus a comparison is made between the actual level that the student has achieved and the expected level or standard, expressed in the criteria (Black & William, 1998; Hattie & Timperley, 2007; Sadler, 1983, 1989, 2010). Within the framework of constructive alignment (Biggs, 2009), this condition refers to the necessary congruence between feedback and learning goals (as expressed in the criteria).

When making this comparison (i.e. the feedback) it is important not to focus only on elements in which the actual level was below the expected level. Lecturers should also point out where the actual level is already at the expected level. In other words, feedback should not just focus on the mistakes, but should include the strong points as well (Brinko, 1993; Lillis & Turner, 2001). It is useful for students to know what still needs to be improved, but it is also important for them to see on what aspects they are already scoring well.

There are a number of advantages in giving feedback with reference to pre-determined criteria. In this way the feedback giver can be sure that feedback is given on the important aspects of the assignment, as the criteria represent these important aspects. This means that the student receives relevant feedback and also helps him or her understand what the key points of the assignment are. Furthermore, the feedback is neither too vague nor too general, but specific.

**Condition 3: the feedback must provide instructions/suggest actions that will enable the student to close the gap between actual and expected level.**

The third condition guarantees that students receive information that can help them to improve their assignments. The idea is that, while students profit from receiving information about their present level, they also need to be helped to reach a higher level. They need to know not only how they are doing, but also how they can improve and correct possible errors (Hattie & Jaeger, 1998; Kulhavy, 1977). Thus, this last condition requires that the feedback giver suggests specific ways in which the student can close the gap between the actual level and expected level (i.e. the criteria) (Ramaprasad, 1983; Sadler, 1983, 1989, 2010).

There are various methods of raising students' learning performance to a higher level. These methods differ in terms of the degree of support provided by the feedback giver. Generally speaking, the amount of support decreases in proportion to how much experience the student has with a particular type of assignment (Vermunt & Verloop, 1999). Thus, the sort of feedback that is given should best be adapted to the experience of the receiver of feedback (Hattie & Timperley, 2007). Put differently, within the framework of constructive alignment, alignment between the feedback content and the process of giving feedback and the individual student is necessary (Biggs, 2009). Table 1 shows various possible methods arranged according to the degree of support they provide.

| Significant support | | | Limited support |
|---|---|---|---|
| (if student has limited experience) | | | (if student has considerable experience) |
| Explicitly indicated | Key questions | Suggestions/Hints | Refer to sources |

**Table 1:** Instructions

The first method is situated on the left-hand side of the chart and involves an *explicit indication* of the solution to the problem or the correction of the mistake. This might involve, for example, explaining clearly what the student still needs to improve with regard to the structure of an essay.

With the second method (*giving key questions*) the feedback giver provides slightly less support. The solution is not stated explicitly. Instead students have to arrive at this on their own by resolving the key questions. In so doing the student has to make use of the experience (limited or otherwise) that he or she has with this type of assignment.

The third method consists of *suggestions or hints*. The feedback giver points the student in the general direction in which the solution can be found or the necessary improvements made. As this involves indicating the general direction, less support is given than in the case of giving key questions, although this method is similar to the key questions approach.

With the fourth method the student receives the least amount of support. The feedback giver indicates a number of *sources* where the student can find the solution to the problem or the correction for the mistake, but there is no question of giving even a general direction. It is up to the student himself / herself to work out the solution or see the improvement that need to be made from the sources provided. These sources can take a number of forms ranging from literature, guidelines, PowerPoint presentations or a specific item of learning content from a particular lesson...

## THE ROLE OF THE FEEDBACK GIVER

The effectiveness of feedback can be improved by applying the conditions described above in the classroom. Firstly, the recipient of the feedback needs to know which criteria he or she should use as a guide. Secondly, the feedback giver must always refer to these criteria in the feedback provided. Finally, feedback should consist not only of information about how the student is doing at that moment, but also about how he or she can improve. Moreover, when using feedback in practical situations in the classroom, there are a number of additional aspects that the feedback giver ought to take into account in order to make sure that he or she gives good quality feedback. We will look at these in detail below. The aspects concerned are: the level at which feedback is given; allowing dialogue; not overdoing the quantity of feedback given; choosing the right moment and giving positive feedback. These constitute major challenges for anyone wanting to increase the effectiveness of feedback in his or her day-to-day teaching.

### Feedback at different levels

Four feedback levels can be identified (Hattie & Timperley, 2007). Firstly, feedback can be focused on the assignment and deal principally with how well or how badly the assignment (i.e. the task) was done. For example, “the learning objectives were not drawn up entirely in accordance with the rules of the discipline”. Secondly, feedback can be about the process (i.e. the strategy) that has to be gone through in order to carry out an assignment, such as

"In order to improve the introduction, you should include a summary of what you are going to say in this chapter". Thirdly, feedback can be focused at the self-regulation level, so that it helps students develop self-evaluation skills and assists them in finding ways of improving their work on their own. For example, "you need to pay more attention to the structure of the essay. Look at the guidelines given in the study material that was handed out and apply them". The fourth feedback level is 'personal feedback', which is feedback that concentrates on the student's functioning. Examples of this kind of feedback are: "You have done well" or "That is an intelligent answer".

The effectiveness of feedback varies according to the level at which it is focused. Personal feedback is the least effective because it tends to be insufficiently specific, has a low information value and draws attention away from the assignment (Butler, 1987; Cameron & Pierce, 1994; Wong & Waring, 2009). The recipient of the feedback only finds out that he or she has done well. No comparison is made with an expected level, nor are suggestions for improvement made, where necessary. However, although this kind of feedback has a low information value, the receiver of this feedback can benefit from it. Students receiving this feedback can be more motivated to undertake new tasks. According to Hattie and Timperley (2007) the most effective methods are (1) feedback focused on the process and (2) feedback focused on self-regulation skills.

These feedback methods are concrete. Students receive instructions about possible strategies which can improve their learning performance. Moreover, this sort of feedback also helps develop more self-regulated learning. Above all, feedback on an assignment is effective if it leads to the development of better strategies for carrying out the assignment. In other words, this sort of feedback only works well if it helps the recipient to understand which strategies lead to an improved performance. This is rarely the case, however (Hattie & Timperley, 2007).

It should also be noted that the most effective forms of feedback (feedback about the process and feedback about self-regulation skills) are interrelated. In both methods feedback is focused on the strategies which students can use to arrive at an improved performance and both are focused on developing more capable, more self-regulated students. The difference between them lies in the degree of external direction given in the feedback. Feedback about the process still involves a fairly high degree of external direction, while feedback about self-regulation is aimed at the more self-regulated student.

## Allowing dialogue

Good feedback is not a one-way street, but rather a dialogue (Ramsden, 1992). Teacher-student dialogue is essential if feedback is to be effective (Laurillard, 2002). As Boud (2000) puts it: "The only way to be sure that feedback given to students results in a learning effect is by letting them react to the feedback and thereby closing the feedback circle. This component of formative evaluation is often forgotten. Only if students use the feedback to improve their work by, for example, re-doing the same assignment, can they *and* the feedback giver know that the feedback has been effective" (p. 158).

It is therefore important to support development of student-teacher feedback dialogue. The ultimate objective of this is, on the one hand, to bring students to a higher level and on the other hand, the necessary task of helping them reach a better understanding of the assignment. Boud (2000) and Nicol & MacFarlane – Dick (2006) assert that this can be achieved by:

- asking students to re-do an assignment using the feedback received;
- giving students the opportunity to discuss the feedback with the feedback giver, for example, by setting aside set times for this;
- organizing a peer-dialogue, whereby students discuss the feedback among themselves.

**Choosing the right moment**

It is not a good idea to overburden students with feedback. Lecturers need to limit the amount of feedback (Brinko, 1993; Ende, 1983; Mckeachie, 1994). Otherwise the feedback giver may find that the student no longer sees the wood for the trees. Equally, it is best not to draw up too many criteria. Lecturers should restrict the number of criteria to the most important aspects of an assignment and give feedback on them (Sadler, 1985).

Ideally, students should get feedback as soon as possible after handing in their assignment or doing an exam (Brinko 1993; Falchikov, 1995; Gibbs & Simpson, 2004; Piccinin, 2003). Feedback is needed in time to be able to use it. When students get feedback they not only need to process that feedback, but also need to connect it to their original train of thought. The longer lecturers wait to give feedback, the more difficult it becomes for the students to remember the original assignment situation. After a little while students no longer remember exactly why they used a particular strategy, or why they included some aspects and not others. This makes the feedback less effective.

In higher education it is often not easy to give feedback quickly, especially if there are large groups of students or in the case of extensive assignments. However, Ramsden (1992) lists a number of ways to give feedback on time even with large classes. These include self, peer or co-evaluation, in which the feedback giver involves the student in the feedback process, so that students are directly involved with the feedback. They both give feedback themselves and receive it quickly (or relatively quickly). Naturally, attention should be given to the feedback quality. Involving students in the feedback process should be a gradual process. Self, peer or co-evaluation gives the lecturer breathing space to look at the assignments for himself/herself and, a bit later, to provide extra feedback in addition to the rapid feedback.

A second option, in addition to self, peer or co-evaluation, is to use a list of commonly made mistakes. Every year students make more or less the same mistakes in their assignments. The lecturer can make a numbered list of these and use it as a guideline when giving feedback. He or she can then go over the assignments quite quickly and point out any mistakes by referring the student to the appropriate number on the mistakes list. Students get their assignments back quickly with a numbered reference to the mistakes list, of which they have a copy (i.e. the guideline). It is important, however, that the guideline does not merely indicate what is wrong. Students should also receive information about how the mistake can be corrected (cf. Sadler's third condition). Students can then correct their mistakes, while the lecturer gets more time to go through the assignments with greater thoroughness.

There is also a fourth method that can be used to give feedback on an assignment or exam in which students have to answer a number of open questions. Here the lecturer gives the model answer as feedback and may also indicate the source from which the correct answer can be found for each question.

**Giving positive feedback**

When giving feedback it is important that at the end of the process the recipient has a positive feeling about that feedback (Piccinin, 2003). This is more likely to motivate the student to use the feedback he or she has received. Feedback is not intended to discourage the student. Naturally, it is important to draw the student's attention to the less successful parts of an assignment, but one should be careful, however, when giving "negative feedback" of this kind. As Ivanic, Clark & Rimmershaw (2000) pointed out, feedback can damage student self-esteem.

The following two methods can prove useful to lecturers in creating a positive feeling when giving feedback. The first method corresponds to Sadler's second condition (1983, 1989, 2010), which states that, when giving feedback, it is important to look at the strong points of an assignment as well as the weak points. Therefore, in order to create a positive feeling the feedback giver should cover both the strengths as well as the not so successful aspects of an assignment. Specifically, this can be done by dividing up the feedback into strong points and suggestions. The second method is more general, but is still closely related to the previous method. In order to produce a positive feeling about feedback, care should be taken with the way this is phrased. The language used affects how a student receives and responds to feedback (Weaver, 2006). The use of judgemental words has been identified as a mechanism for damaging self-esteem and inhibiting learning (Boud, 1995). Thus, lecturers should use terms such as "suggestions" or "attention points" when referring to mistakes, but at the same time pay attention . Similarly, rather than bluntly stating that something is wrong, phrases such as "this doesn't entirely meet the criteria. This can be improved by doing "*x*" can be used. There a great many other ways of softening the message. By being careful with how the feedback is worded, the lecturer can convey the same message in a more motivating way. Again, the intention of feedback is that students should learn from it. Feedback should not be used to punish or discourage them.

**Conclusion**

Feedback is a very important factor for learning quality and is therefore closely related to how well students perform in higher education. The importance of feedback is emphasised in the attention given to feedback in guidelines for quality assurance in higher education, for example, the UK Quality Code for Higher Education (QAA, 2011) or the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ENQA, 2005).

With the guiding principles in this article we are trying to build on and extend the suggestions given in these guidelines and, in this way, contribute to a general acceptance of different feedback practices as important learning tools in higher education.
It is clear from our perspective on literature and research that feedback has specific defined functions in higher education. One of the most stressed functions is that feedback is a learning tool which helps students see what they know and what they can do, but which also provides them with strategies for improving their performance. In this sense 'feedback' is not just 'feed-*back*', but also 'feed-*forward*' (Duncan, 2007). Effective feedback does not just look back at how students have done, but also looks forward towards the next level of achievement. We have provided insight that these functions are only fulfilled if feedback is given effectively in which we referred to the context and role as well as the ways in which qualitative feedback can be given. In this article we have bridged feedback theory and practice. Specifically, in our review of literature and research we have focused upon some guiding principles to enhance the quality in feedback processes in practice in higher education. By presenting and elaborating upon Sadler's framework, we however did not want to reduce the complexity of conditions to achieve effective feedback in higher education context. An important condition less stressed in Sadler's model can be situated within the intra-individual learner domain. Little is known for instance about how intra-individual learner differences such as personality traits, motivation, self-esteem and self-efficacy as well as students' individual learning styles (Evans & Waring, 2011) or learning patterns (Donche, Coertjens, & Van Petegem, 2010) have an impact on the reception of feedback.

Regardless of the importance of further empirical investigation of the validity of the conditions within Sadler's framework and further elaborations, it seems equally important to address in future research how different individual learner characteristics play an influential or moderating role in the perception of quality of feedback processes (Gibbs & Simpson, 2004). Especially if we aim to better understand the impact of feedback processes on the quality of learning outcomes it seems important to not only investigate the actual learning environment related factors but also how students perceive these factors. This has for instance been pointed out in research on the impact of learning environments on learning approaches (Entwistle, 1998; Gijbels, Coertjens, Vanthournout, Struyf & Van Petegem, 2009). This calls for research that concentrates on both the actual and perceived conditions for effective feedback in which an individual learner perspective can be taken into account.

To move forward in our current understanding of effective feedback processes in higher education we need also to move beyond the "why" and "what" questions. By giving some practical suggestions to foster basic conditions for achieving quality in feedback, we hope to have provided also answers on some of the "how" and "when" questions. As we are aware of the complexity of giving feedback, we however stress the need to critically reflect upon these reported conditions and further test the validity of these claims in everyday educational practice.

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