# Professional development: giving effective feedback in higher education

*Eindhoven University of Technology (TU/e) Bachelor College project on 'Giving effective feedback to students'*

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## Background to the project

Nowadays, teachers in higher education more and more encounter larger groups of students which are more diverse. Simultaneously the goal of education is shifting towards preparing students for life-long learning. Teachers might need to shift their teaching style from a more teacher-centered style to a more student-centered style. In student-centered teaching styles the teacher often has a more coaching-based style in which feedback skills are essential. Feedback is found to be one of the most important influences on learning (e.g., Hattie & Timperley, 2007; Hattie, 2009). In other words: providing effective feedback is a powerful tool to reinforce student learning. However, providing effective feedback (i.e., reinforcing learning) is not easy, and giving feedback does not always result in learning (e.g., Hattie & Timperley, 2007; Shute, 2008).

Against this background several teacher trainers and researchers of the TU/e started a project funded by the TU/e Bachelor College to (1) get an overview of recent developments in research on effective feedback, (2) get an overview of the current state of affairs at the TU/e as seen by teachers and directors of education, and (3) create products for professional development on feedback skills.

The project is based on several suppositions: (1) the quality of feedback given is strongly influenced by the teachers' knowledge, beliefs and quality concepts concerning learning, teaching and feedback; (2) these aspects are often not taken into account sufficiently during innovations; (3) consequently the teaching practice often does not move sufficiently towards the desired outcome; (4) therefore it is essential that professional development connects to the current knowledge and skills of the teachers.

## Preliminary inquiry

As part of our project we conducted a preliminary inquiry, wherein we performed a literature review and interviewed TU/e teachers and directors of education. A first conclusion from these interviews is that teachers and Directors of Education have a teacher-centered view on learning, teaching and feedback. A second conclusion is that both teachers and directors of education consider feedback to be important. Individually they do not list all aspects of high quality feedback (in terms of e.g. Hattie &

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[1] This document is based on - besides the project data - (previous) research of  M. van Diggelen and M. Thurlings, with support from C. Morgan, A. Tops and C. van Weert.

Timperley, 2007), but as a group they do. A third conclusion is that according to the teachers, most students gradually develop a feedback inviting attitude during their study. students

We also asked whether they saw a need for further professional development on feedback skills, and if so, what their preferred method was. All but one of the interviewees saw this need within their Department. They showed a preference for methods whereby they learn hands-on, with colleagues, under supervision of an expert, and based on a sound theoretical background and best practices.

The details on the theoretical background for this project and the preliminary inquiry are described in a separate article[2].

## Implications for professional development

Based on preliminary inquiry and the needs expressed by teachers and directors of education, we came to the following implications:

1. To reach the goals intended by the Bachelor College educational innovation (Meijers & den Brok, 2013), the teachers need to:
   a. be convinced of the need that students take on a self-regulating attitude towards learning and feedback, and
   b. have sufficient knowledge and skills on learning, teaching and feedback to be able to give effective feedback to help students gain insight and skills necessary for them to take on this new attitude.
   c. Learn to recognize and focus their feedback on different aspects of learning (e.g. levels of feedback Hattie and Timperley, 2007)
2. To enable the above points we need to design the professional development in such a way that the teachers become aware of their current knowledge and beliefs concerning teaching and learning, and understand the consequences this has for effective feedback. A possible added result could be that the awareness causes changes in their beliefs about teaching and learning, and as a consequence also changes their beliefs about feedback.

## Products for professional development

These implications led to the development of the following products:

- Training component on feedback skills
- Guide for coaching on feedback skills
- Manual giving effective feedback
- (Self-)assessment instrument

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[2] To be submitted to *Tijdschrift voor Hoger Onderwijs* in 2015.

## Training component on feedback skills

We decided to developed a training component to be included in the Teaching Skills module of our teacher training course program.   In the Teaching Skills module, participants (design and) practice their teaching plan for several contexts, such as lectures, tutorials, project and coaching sessions.

During the first session of this module we start off by looking at the participants' beliefs about teaching and learning, and how this relates to their beliefs about feedback. Participants then familiarize themselves with the (self-)assessment instrument by filling it in based on a video of an example teaching situation. They then reflect on how that matches their beliefs. Following that they get an assignment to prepare a teaching plan for a teaching context of their choice, and they get to practice this during a next session. The aspect of feedback should explicitly be taken into account in their teaching plan, and the trainer and all other participants will give feedback on this.

## Guide for coaching on feedback skills

We also developed a guide for coaching individual teachers (coachees) on their feedback skills. The manual and (self-)assessment instrument are supportive tools for the coach and coachee. The guide describes the process of (1) the intake, (2) the coaching sessions, (3) observation of the teacher in a real-life teaching context, and (4) how to incorporate the use of the manual and (self-)assessment instrument.

## Manual giving effective feedback

The 'manual giving effective feedback' is an instrument to make the teachers aware of all the ways in which they are already giving effective feedback, and to gain inspiration to expand these skills. The manual does not contain a simple recipe for providing effective feedback, but is based on a recent model that depicts how feedback can be provided and how it can be(come) effective for learning. This model was developed by two New-Zealandia full professors, John Hattie and Helen Timperley. The manual can be used by both novice teachers and more experienced teachers, and in several settings, such as individual use, training setting, and coaching setting.

## (Self-)assessment instrument

The (self-)assessment instrument  aims to give teachers insight in how they currently provide feedback, and to make a plan for further development on these skills. The above mentioned accompanying manual serves as additional information to the (self-)assessment. The (self-) assessment instrument can be used in several ways, such as a (1) one-off diagnostic instrument for teachers: as a self-assessment form, (2) one-off diagnostic instrument for an observer, such as a colleague or (peer-)coach: as a peer-assessment form, and (3) developmental instrument: the form is used on several occasions, for example before and after coaching to get insight into a teacher's development.


## First experiences

We tested the manual and (self-)assessment instrument on three different occasions with different groups of participants, namely (1) a representation of the teachers and directors of education we interviewed earlier on during the project, (2) teacher trainers from other organizations, and (3) TU/e

teachers , who had not yet been involved in this project. We made use of a part of the developed training module, and thus had the participants work with the manual and (self-)assessment instrument.

Several users from the first group pointed out, that the model is quite complex; the user needs to invest some time and effort to make use of the full potential of the model. The second group also mentioned this point, and because of this wondered whether the tools would be suitable for a training or coaching setting. However, using the tools during the session led to many interesting discussions and insights into giving effective feedback. Because of this, the teacher trainers were quite positive about the tools and model of Hattie and Timperley as input for their own coaching and teaching on feedback skills.

Based on these experiences we decided to adapt the set-up for the third group slightly, and position the tools in a different manner. We did this by clarifying that it is not the goal that the participants will have fully absorbed the model by the end of the session, but that it is a starting point for development of their feedback skills. This last group of users were very enthusiastic about the model and tools, and did not want them to be simplified.

Based on the three user tests, it seemed that the most important adjustments to be made were not in the tools themselves, but in the positioning of the tools, so that there was a better fit between users' expectations and the function of the tools.

The user tests led to several adjustments, of which the most important ones were the following:

- Add an introduction to the manual to clarify the goal and goal audiences, and to give a more explicit definition of giving feedback.
- Add the picture of the model of Hattie and Timperley to the manual, to support better understanding of the model.
- Condense the text in the (self-)assessment instrument to improve usability.
- Allow more time during the training component for participants to read the (self-)assessment instrument before being asked to use it.

## References

Hattie, J. (2009). *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, *77*(1), 81–112. doi:10.3102/003465430298487

Shute, V. (2008). Focus on formative feedback. *Review of Educational Research*, *78*(1), 153–189. doi:10.3102/0034654307313795

Meijers, A., & den Brok, P. (2013). *Ingenieurs voor de Toekomst: Een essay over het onderwijs aan de TU/e in 2030.* Eindhoven: TU/e.

## Related documents
- Training component on feedback skills
- Guide for coaching on feedback skills

- Manual giving effective feedback
- (Self)-assessment instrument
- Article to be submitted to *Tijdschrift voor Hoger Onderwijs,* by M. Thurlings and M. van Diggelen (in cooperation with C. Morgan, A. Tops and C. van Weert),  concept title 'Het geven van effectieve feedback aan studenten in het hoger onderwijs' (Giving effective feedback to students in higher education)