Teacher factsheet

Peer feedback; info for teachers

In many classrooms around the world teachers aim to provoke deep learning in their students in an effort to ensure that they understand rather than just memorize a concept. In recent years, peer feedback has been considered as a potentially facilitating activity during this process. This fact-sheet places peer feedback in the context of deep learning and summarizes what is known about effectively introducing, explaining and structuring peer feedback activities in higher education.

What is peer feedback?

Peer feedback is defined as an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the products or outcomes of learning of peers of similar status. They then share their insights in written or oral form but do not grade each other.

What does it offer?

It is an educational tool that is being utilized in many universities already, often to give students an opportunity to receive feedback in larger classes where the teacher may not be able to review everybody's work in detail before the final submission. Recently, peer feedback has gotten renewed attention in the quest for deep learning in higher education. It is beneficial for the development of key academic competencies of all participating students, providers and receivers of feedback alike, especially if they get involved in an academic discussion.

Academic process reflection
By analyzing a peer's work, students reflect upon their own understanding of the assignment and its content. Regular timely feedback at different stages of the pro-cess enables students to improve their product and monitor their progress continuously.

Expansion & revision of knowledge
Students may integrate ideas they encounter in anoth-er's work into their own conception of their subject. This provides an opportunity for academic discourse when the feedback is discussed, which stimulates critical thinking, helps to integrate new knowledge as well as to make new connections.

Communication skills
Students practice formulating their ideas concisely and explain or back up their understanding of the task and content when facing opposing views.

How does it promote deep learning?

Many of the driving forces behind deep learning can be ignited and maintained through peer feedback activities.

- ✔ **Participative environments** improve attitude towards learning, acquisition of knowledge and willingness to collaborate.
- ✔ **High-level questions** that ask students to analyze and evaluate a text demand employment of critical thinking.
- ✔ **Providing peer feedback** gives students an idea about their current and desired state of knowledge, while also providing directions for improvement, prompting them to evaluate their own work.
- ✔ **Receiving peer feedback** challenges critical thinking as students often do not accept advice easily from peers.
- ✔ **An academic dialogue** between provider and receiver of peer feedback further stimulates deep learning.

The above-mentioned items are somewhat automatically a part of most peer feedback activities. There are some additional factors, that play a role in deep learning, that may appear less directly linked to peer feedback. However, they do become more relevant over time in a long-term context.

- ✔ **Past success** of employing deep learning strategies increases the likelihood that students will use them again.
- ✔ **Student intention** may change from memorizing to wanting to understand the material as deep- learning strategies are successfully applied.

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The Feedback loop

Recently, there has been a push to see peer feedback as a loop which increases learning opportunities for students. They not only pro-vide peer feedback, but they also react to the feedback received either online or face-to-face, where they engage in an academic dialogue. This turns the process into a more collabora-tive effort which promotes deep learning.

Making peer feedback effective

In order for peer feedback to be a useful educational activity, certain circumstances need to be created that make it fruit-ful for both teachers and students. The table below lay out some ideas about introducing, explaining and structuring peer feedback that have been shown to improve its overall quality as well as students' willingness to engage in it. They are presented in pairs of problems, that may come up before, during or after the process, and possible solutions. Some of the solutions may seem like common sense, however, it is important to remember that giving and receiving feedback is difficult and students may need more explicit guidance than you would expect.

	PROBLEM	SOLUTION
BEFORE	Students do not know how to give (good) peer feedback.	Provide ample information (e.g. factsheet) about what peer feedback is and how to give feedback in an academic context. Whenever quality of feedback is low, it is often because students simply "do not know better".
	Students do not see why giving feedback is relevant.	At university, students may demand and have the right to know *why* they get cer-tain assignments. Presenting scientific evidence about how this activity contrib-utes to their academic development can increase their motivation.
	Students are hesitant to engage in peer feedback when there are big skill and/or effort discrepan-cies among their classmates.	It is important to point out that *giving* peer feedback is just as valuable for academic improvement as *receiving* peer feedback. There may well be quality differences in the feedback, however, these should then be explicitly discussed afterwards to ensure that both, higher and lower skill/effort students benefit. Additionally, pairs/groups should be regularly shuffled to avoid stagnation of the feedback process.
DURING	PROBLEM	SOLUTION
	Students are vague in their feedback.	Reformulating instructions and rubrics from vague into specific prompts can help students elaborate on their feedback. Questions such as "At what point did you identify the main research question of the paper?", or "What is the main question according to you?", are easier to answer than "Is the main question of the paper clear?".
	Students are too "nice" or too "mean".	Students should be asked explicitly to reflect on what kind of feedback *they themselves* find most helpful. They also need to know that feedback is not always critique but positive elements should also be pointed out.
AFTER	PROBLEM	SOLUTION
	Students do not discuss the feedback they gave and received.	It is vital to make time during class hours for students to discuss the feedback they gave and received as well as the peer feedback process as a whole. Once students are comfortable and confident about the process, these discussions may happen independently of class hours.
	Students do not incorporate the feedback they received.	If students receive feedback from different peers on different tasks it is likely that they start recognizing its value automatically. However, whether they want to incorporate the feedback remains their choice.
	Students do not agree with the feedback they received.	Students should be given a chance to discuss their disagreements about their own or others' work. Such a discourse results from and in critical thinking which is an important element of deep learning.

References

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