Is peer feedback more effective in teams?
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1. Introduction
We are unable to predict what our students will be doing 20 years from now. This is why we educate students to be “T-shaped professionals” who have extensive knowledge of their field, but who can, in collaboration with society and other disciplines, apply their knowledge more widely.

Students have different demands. Their lifestyle and the way they handle information are different than those of previous generations. The University of Twente is not the only knowledge source. With this in mind, the UT has been radically redesigning all of the bachelor’s programmes according to our own Twente Educational Model (TEM), taking effect in the 2013-2014 academic year.

2. TEM Principles
- Modular approach
- Project based work
- More focus on pursuing students’ interests
- Students learn together
- More responsibility for students

3. Feedback
In TEM, students have to play a more active part in their own learning process. The most important reasons for students to be more involved in giving and receiving feedback:
- Peer feedback enables students to take an active role in the management of their own learning (Liu & Carless, 2006). Providing feedback to peers can fill the gap between what students know and what students have to know, and therefore it stimulates students to reflect on their own performance which enhances ‘deep learning’.
- Development of the skill ‘giving and receiving feedback’ is very important to constant learning in everyday life and work (Boud & Falchikov, 2006).

4. Steps taken so far
- Three pilots with WebPA (feedback on teamwork)
- One pilot with CANVAS (feedback on products)
- Evaluation of results

5. Results of peer feedback teamwork
WebPA is easy to adopt in education

Peer feedback is effective

6. Results of peer feedback product
Digital solution has value

Quality needs improvement

Figure 1: Evaluation results of student peer feedback pilot

Figure 2: Peer grading and instructor grading of the CANVAS assignment

Explanation figure 2: Improvements were made between the time of peer grading and instructor grading, so some instructor grades may be justifiably higher than the peer grades; however:
- a) the degree to which the subset of the assignments above the imaginary diagonal “perfect correlation line” (running from 0-0 to 10-10) has higher peer grades than instructor grades does not seem acceptable, and
- b) the outcome is a disappointing weak correlation between peer judgments and instructor judgments.

7. Lessons learned
Giving digital feedback on teamwork is easy, but the value of the feedback is more effective in combination with face to face meetings.

Giving digital feedback on the products has value; a digital tool simplifies the organization. The quality of the peer feedback is far from ideal. Practice makes perfect.

8. Future
Suggestions for further research:
1. Is peer feedback more effective in teams than in pairs? For teamwork and/or products?
2. How to develop effective instruction for giving and receiving feedback on teamwork and/or products.

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