

Fast feedback fostering student motivation.

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ABSTRACT

Keywords – Feedback, extrinsic motivation, assessment, practice.

Please indicate clearly the type of contribution you are submitting: ___ hands-on, X explore, ___ poster.

I. Background

Feedback [1] can have a big impact on student learning. Especially when feedback is part of a formative assessment [2] When students receive feedback, they get information about what they are doing well and what they can improve, and this can lead to higher extrinsic motivation.[3]

When students receive positive feedback for their performance, it can increase their confidence and motivation to continue learning and improving. Similarly, constructive feedback that includes specific suggestions for improvement can help students overcome obstacles, master new skills and concepts, while increasing their motivation to participate in an active learning environment.

II. Explanation

Beginning in the second week of the semester, the students are given 2 sets of assignments, 2 weeks apart, relating to basic electrical circuit theory, which the subsequent part of the course builds on. The students have 1 week to solve each of the assignments and receive individual personal feedback via the e-learning system "itslearning" no later than 2 days after the deadline for submitting the assignments. The feedback begins with an overall assessment of what has been submitted, but also focuses on errors, misconceptions and misunderstandings and indicates how the task could be solved correctly in the event of an error. Along with feedback, the students receive a copy of the lecturer's proposal for solving the tasks. As far as possible, the feedback supports covering the 7 principles of good feedback practice [4]. The students are deliberately not being graded as research suggest that this might have a demotivating effect [5].

III. Results

At the end of the course, the students were given a questionnaire via "itslearning" with 7 questions addressing the quality of the assignments, the quantity, quality, speed and communication of feedback. Whether the feedback increased students' perceived learning and whether feedback influenced the students' motivation to actively participate in the lessons afterwards. 30 out of 36 students answered the questionnaire. The figure below shows the mean value and standard deviation of responses. The result of the study indicates that the rapid feedback has had a significant impact on the students' learning outcomes and motivation.

IV. Discussion

At the end of my presentation at ETALEE2023, I would like to discuss with the participants in the ETALEE2023 "Explore session", my approach to "Fast feedback" with implications, potential pitfalls and possible future development of the concept.

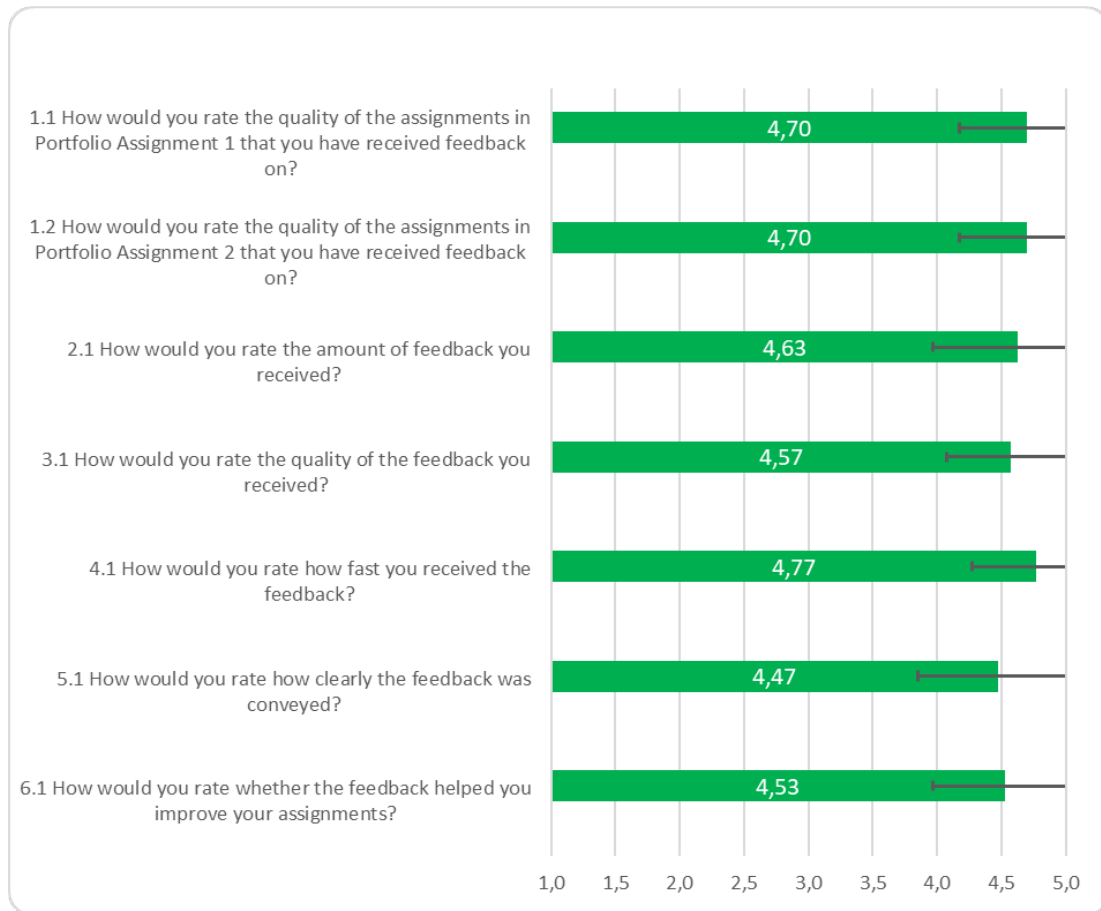


Fig. 1: Questions related to feedback – scale is 1 – 5

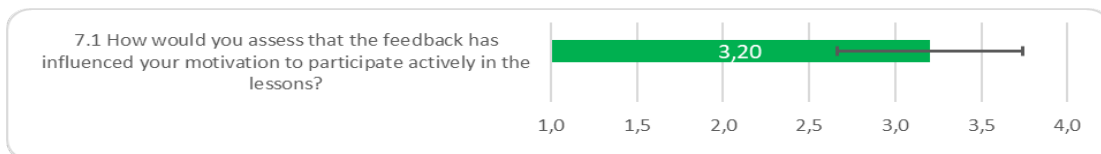


Fig. 2: Impact on students motivation – scale is 1 - 4

REFERENCES

- [1] Hattie, J. & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research*, 77(1), 81-112.
- [2] Black, P. & Wiliam, D. (1998). Assessment and Classroom Learning. *Assessment in Education*, 5(1), 7-74.
- [3] Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.
- [4] Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative Assessment and Self-Regulated Learning: A Model and Seven Principles of Good Feedback Practice. *Studies in Higher Education*, 31(2), 199-218.
- [5] Ferguson, J., & Carless, D. (2018). The impact of grading and feedback on student motivation: A mixed-methods study. *Assessment & Evaluation in Higher Education*, 43(8), 1330-1342.