


## Students' Motivation, Satisfaction, and Perceived Learning Using Online Peer Feedback in the Context of Argumentative Essay Writing

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**Abstract:** According to the literature, students' motivation and satisfaction can influence their perceived learning outcomes. However, little is known about what kind of a role do motivation and satisfaction play in the context of online peer feedback. This exploratory study aims to examine the relationship between students' motivation and satisfaction with their perceived learning outcomes in an online peer feedback environment. To do this, 49 graduate students from a Dutch university participated and they were involved in an online peer feedback module for argumentative essay writing. At the end of the module, students were asked to fill out surveys regarding their motivation, satisfaction, and perceived learning outcomes. The results showed that there is a positive correlation between students' motivation and satisfaction with their perceived learning outcomes in an online peer feedback environment in the context of argumentative essay writing. These results provide insight into how students' motivation and satisfaction can impact their perceived learning outcomes during an online peer feedback activity in the context of argumentative essay writing.

**Keywords:** Argumentative Essay Writing, Motivation, Online Peer Feedback, Perceived Learning Outcome, Satisfaction

### Introduction

Peer feedback has been utilized to help students improve their argumentative essay writing. Prior research confirms its effectiveness in improving students' argumentation skills in essay writing (e.g., Latifi & Noroozi, 2021; Latifi et al., 2021) and learning, engagement, and motivation (e.g., Gielen et al., 2010; Pratama & Arriyani, 2021; Zhang et al., 2014). Student satisfaction is essential in understanding the effectiveness of online learning (Arbaugh & Benbunan-Fich, 2007; So & Brush, 2008). Teachers are unable to offer effective one-on-

one feedback on students' argumentative essay assignments because of a tremendous workload (Akhteh et al., 2022; Latifi & Noroozi, 2021; Latifi et al., 2021b; Noroozi & Hatami, 2019) so peer feedback has been recognized as an efficient teaching approach to assist students in enhancing their argumentative essay compositions in such situation. Argumentation is seen as an important skill for students (Prata et al., 2019). Peer feedback has been suggested to enhance students' argumentative essay writing, and previous research has shown that it is significant in improving students' argumentation skills and knowledge in essay writing (e.g., Latifi & Noroozi, 2021; Latifi et al., 2021). Although online peer feedback was an effective instructional technique for improving students' argumentative essay writing quality, only a few research investigated students' motivation, satisfaction, and perceived learning with such online learning activity in the context of argumentative essay writing. As a result, the purpose of this research was to investigate students' motivation, satisfaction, and perceived learning using online peer feedback activity in the context of argumentative essay writing. To address research, the following research questions are formulated and answered in this study.

- RQ1. To what extent does students' motivation predict their perceived learning outcomes in an online peer feedback environment?
- RQ2. To what extent does students' satisfaction predict their perceived learning outcomes in an online peer feedback environment?

## Method

In this research, 49 graduate students participated from Wageningen University and Research (WUR) in online course from the social sciences domain. A questionnaire with 38 items developed by Mahdizadeh (2008) and adjusted by Noroozi et al. (2107) was used to measure students' motivation, satisfaction, and perceived learning with online peer feedback activity. Multiple Linear Regression and Pearson correlation coefficient were used to analyze data.

## Results

Results showed a positive correlation between students' motivation and satisfaction with their perceived learning outcomes in an online peer feedback environment in the context of argumentative essay writing ( $r=0.690$ ,  $p<0.001$ ;  $r =0.762$ ,  $p>0.001$ ). Students with a high level of motivation showed a high level of perceived learning outcomes so students' motivation is a strong predictor of their perceived learning outcomes in argumentative essay writing. Students with a high level of satisfaction showed a high level of perceived learning outcomes. So students' satisfaction is a strong predictor of their perceived learning outcomes in argumentative essay writing.

## Conclusion

According to the findings of this study, students are very satisfied and motivated by online peer feedback and

this satisfaction impacts their learning outcomes positively. Furthermore, it was discovered that students consider learning to be enjoyable while participating in online peer feedback activities. This shows that students find online peer feedback useful, that they are satisfied with their learning through online peer feedback activity, and they are motivated to keep using peer feedback in the context of argumentative essay writing. The findings indicate that online peer feedback can be a powerful instructional technique in the context of argumentative essay writing and the results of this study are in line with previous studies. (Latifi et al., 2019, Noroozi et al., 2016; Noroozi & Mulder, 2017).

## Recommendations

In this study, we explored the role of motivation and satisfaction of students using online peer feedback on perceived learning in the context of argumentative essay writing. Consideration of the role of teachers as a mediator variable can help in understanding important aspects of perceived learning outcomes. Additionally, to explore the impacts of online peer feedback on perceived learning we exclusively employed quantitative data analysis and measures. However, we admit that qualitative analysis would add value to the study's conclusions.

## Notes

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## References

- Akhteh, M.P., Farrokhnia, M., Banihashem, S.K., & Noroozi, O. (2022). The Relationship between Students' Satisfaction and Motivation and their Perceived Learning Outcome in an Online Peer Feedback Module. In O. Noroozi & I. Sahin (Eds.), *Studies on Education, Science, and Technology 2022* (pp. 297-310). ISTES Organization.
- Arbaugh, J. B., & Benbunan-Fich, R. J. D. s. s. (2007). The importance of participant interaction in online environments. *Decision support systems*, 43(3), 853-865. <https://doi.org/10.1016/j.dss.2006.12.013>
- Carless, D., & Boud, D. (2018). The development of student feedback literacy: enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, 43(8), 1315-1325. <https://doi.org/10.1080/02602938.2018.1463354>
- Gielen, S., Peeters, E., Dochy, F., Onghena, P., & Struyven, K. (2010). Improving the effectiveness of peer feedback for learning. *Learning and instruction*, 20(4), 304-315. <https://doi.org/10.1016/j.learninstruc.2009.08.007>
- Latifi, S., Noroozi, O., Hatami, J., & Biemans, H. J. A. (2019). How does online peer feedback improve argumentative essay writing and learning? *Innovations in Education and Teaching International*, 58(2),

195–206. <https://doi.org/10.1080/14703297.2019.1687005>

- Latifi, S., & Noroozi, O. (2021). Supporting argumentative essay writing through an online supported peer-review script. *Innovations in Education and Teaching International*, 1-11. <https://doi.org/10.1080/14703297.2021.1961097>
- Latifi, S., Noroozi, O., Hatami, J., & Biemans, H. J. (2021). How does online peer feedback improve argumentative essay writing and learning?. *Innovations in Education and Teaching International*, 58(2), 195-206. <https://doi.org/10.1080/14703297.2019.1687005>
- Latifi, S., Noroozi, O., & Talaei, E. (2021b). Peer feedback or peer feedforward? Enhancing students' argumentative peer learning processes and outcomes. *British Journal of Educational Technology*, e13054. <https://doi.org/10.1111/bjet.13054>
- Liunokas, Y. (2020). Assessing Students' Ability in Writing Argumentative Essay at an Indonesian Senior High School. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 8(1), 184-196. <http://dx.doi.org/10.24256/ideas.v8i1.1344>
- Mahdizadeh, H. (2008). *Student collaboration and learning. Knowledge construction and participation in an asynchronous computer-supported collaborative learning environment in higher education*. PhD dissertation, Wageningen University and Research, The Netherlands
- Noroozi, O., Biemans, H. J. A., & Mulder, M. (2016). Relations between scripted online peer feedback processes and quality of written argumentative essay. *The Internet and Higher Education*, 31, 20-31. <https://doi.org/10.1016/j.iheduc.2016.05.002>
- Noroozi, O., & Hatami, J. (2019). The effects of online peer feedback and epistemic beliefs on students' argumentation-based learning. *Innovations in Education and Teaching International*, 56(5), 548-557. <https://doi.org/10.1080/14703297.2018.1431143>
- Noroozi, O., & Mulder, M. (2017). Design and evaluation of a digital module with guided peer feedback for student learning biotechnology and molecular life sciences, attitudinal change, and satisfaction. *Biochemistry and Molecular Biology Education*, 45(1), 31-39. <https://doi.org/10.1002/bmb.20981>
- Pratama, P., & Arriyani, N. (2021). Descriptive Text Writing: Peer Response Strategy and Students' Learning Motivation. *English Language in Focus (ELIF)*, 4(1), 81-88. <https://doi.org/10.24853/elif.4.1.%25p>
- Prata, M. J., de Sousa, B., Festas, I., & Oliveira, A. L. (2019). Cooperative methods and self-regulated strategies development for argumentative writing. *The Journal of Educational Research*, 112(1), 12-27. <https://doi.org/10.1080/00220671.2018.1427037>
- So, H. J., & Brush, T. A. (2008). Student perceptions of collaborative learning, social presence and satisfaction in a blended learning environment: Relationships and critical factors. *Computers & education*, 51(1), 318-336.
- Zhang, H., Song, W., Shen, S., & Huang, R. (2014). The effects of blog-mediated peer feedback on learners' motivation, collaboration, and course satisfaction in a second language writing course. *Australasian Journal of Educational Technology*, 30(6), 670-685. <https://doi.org/10.14742/ajet.860>