

Title: Peer assessment using Workshop Activity in Moodle at University of Maribor (Slovenia)

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Abstract:

In remote teaching and learning due to the COVID-19 pandemic, we faced challenges and changes in most stages of the traditional pedagogical process. Among the most demanding stages are the evaluation and assessment of student's knowledge, which require special attention. Alternative online methods provide an opportunity for a successful remote assessment of knowledge, skills, and competencies. The most common online alternative assessment methods in pedagogical practice are case studies, portfolios, projects, quizzes, interviews, and peer assessment. Peer assessment is an assessment of students' work (e. g. report, research paper, essay, presentation) done by their peers according to specific criteria set in advance by the teacher. In this process, students are not acting only as the author of the work but also taking on the tasks of the peer reviewer. Using alternative online peer assessment methods in Moodle e-learning environment, we create learning situations in which students take a role that often mimics future work environment tasks and establish different relationships with co-learners, teachers and learning content. Compared to traditional methods, this method encourages the student to use a combination of skills and knowledge and activate higher levels of Blooms' taxonomy.

Centre for Teaching Support of the University of Maribor (UM) (Department of Education and Study) provides guidelines and support to university teachers (hereafter teachers) for using alternative methods of assessing students' knowledge. The presentation aims to give an insight into didactical and technical support for implementing peer assessment using standard Moodle Workshop activity and to present a good practice of peer assessment using Moodle Workshop activity in the learning units of quantitative and qualitative research methods at the master's degree programs of the Faculty of Arts UM. All students and teachers of the UM use one central installation of the Moodle Learning Management System (Moodle UM), available for all 17 faculties.

At UM, we prepared didactical guidelines for teaching peer assessment, a user guide for Workshop activity in the Moodle UM and online workshop training for teachers entitled "Using the Moodle Workshop activity for peer assessment in Moodle UM". With the aim to train teachers for using Workshop activity in the Moodle UM to implement peer assessment, we prepared an online workshop with the three main chapters.

The first chapter entitled "Peer evaluation and assessment" included an introductory question about participants' knowledge of peer assessment and Moodle Workshop activity, a podcast about the theoretical background of peer assessment, examples of good practices using peer assessment and a short video presentation of five phases of Workshop activity (Setup phase, Submission phase, Assessment phase, Grading phase and Closing phase). In the second chapter entitled "Planning and setup phase", participants have to prepare a draft plan for peer assessment implementation in their teaching unit(s) (i.e. defining the study results that will be evaluated and their assessment criteria). In addition to reading materials, the online workshop provides video tutorials (step-by-step guide for the Setup phase) and guides (a guide for choosing the most appropriate assessment strategy in Workshop activity, a guide for assessment with method of rubrics). Teachers were able to test and experiment with all available assessment strategies of Moodle Workshop (i.e. comments, number of errors, cumulative assessments or rubrics) in four demo workshop activities. Based on these learning materials and activities, participants upgrade and enrich their plan for peer assessment implementation. In the third chapter, entitled "Submission, Assessment and Grading phase", video guides for each workshop phase, including the last phase "Closed", were provided. Within this chapter,

special attention was given to content about anonymous peer assessment to overcome the challenge of subjective evaluation and uncomfortable feelings of students because of reviewing their classmates. Also, the anonymous peer assessment is recommended in accordance with GDPR. Finally, participants have to self-evaluate their competence in using Workshop activity and understanding the Grading phase and proper use of Final report with students' grades. The last chapter entitled "Final activities" included a quiz for assessing participants' knowledge about assessment strategies, Assessment phase and Grading phase. Additionally, they participate in Forum activity by providing their opinion about the usefulness of peer assessment in their teaching practice, which advantages and challenges they see. The majority of participants have a favourable opinion about using Workshop activity with their students. They highly appreciated and valued peer assessment for developing critical thinking, strategies of self-regulative learning, time management, responsibility and motivation for quality of study in university students, particularly in the learning activities with written examinations, within smaller groups (e.g. tutorials) and graduate study programs. The biggest challenges, in their opinion, are a subjective evaluation of students (e.g. favouring friends) when anonymous participation is not possible, fear of group exposure, and lack of knowledge. However, participants agreed that these challenges could be overcome by comprehensive planning and regular implementation of peer assessment in the pedagogical practice.

As an example of good practice, we implemented peer assessment in Moodle Workshop activity at the Faculty of Arts UM in the winter semester of the academic year 2020/2021. Master's degree students of Pedagogy and Sociology participated in this activity within the two learning units: "Quantitative and qualitative pedagogical research" and "Advanced (multivariate) statistical methods with software usage". The students, in both courses, designed a written assignment – a research project - based on empirical data and statistical analysis. The projects were prepared in the form of a research article in the extent of 3.000-5.000 words. Students could work individually, in pairs or in groups. Two peer assessments in Moodle Workshop activity were implemented to learn how to give and how to receive professional feedback on a written work, get familiar with the criteria of a high-quality written research report, developing critical thinking and strategies of self-regulative learning.

The assessment strategy of rubrics with seven assessed research methodology quality criteria in a 4-level grading scale and conclusion remarks in non-anonymous peer assessment was implemented in the first version of the Workshop activity. The second implementation based on the assessment strategy of numbers of error with the eight assessed criteria in dichotomy grading scale (yes/no), comments for each criterion and concluding remarks in anonymous peer assessment. In the second implementation, a teacher took an active role as the reviewer and gave the students descriptive and numerical feedback on their peer assessment quality. The teachers' feedback included evaluation of content, methodology and editing aspects of reviews. In both activities, every student evaluated one work from another classmate. Based on the focus group discussion and written feedback in Moodle (Choice and Feedback), the final evaluation showed students' enthusiasm and high level of interest for peer assessment as a new learning experience. They highly valued the opportunity to express their own opinion, draw parallels between their work and knowledge with peers, get a better understanding of research quality criteria and insights from the perspective of supervisor/reviewer/editor, and test their knowledge. They see learning how to give and accept feedback as essential competence in the social and humanities professions. Time required for learning the new online tool, extensive sitting in front of the device's screens due to the COVID-19 pandemic, fear of judging peer, non-anonymous assessment and lack of knowledge and understanding of assessment criteria seems to be the main challenges in peer assessment. Nevertheless, better achievements in peer review were recognized by students, who prepared a high-quality written report and showed a higher level of methodological knowledge at the written exam.

In the future, different assessment strategies with more assessment rounds and self-assessment should be implemented. With randomly anonymous allocated assignments, comprehensive explanation, and involvement of students in discussion on assessment criteria, including example cases, multiple repetitions of activity, and teachers' feedback on the quality of students' peer assessment, we can overcome challenges and significantly improve implementation of peer assessment in higher education. Moreover, Moodle Workshop Activity seems to be an up-and-coming teaching and learning method for students' research supervision at all university degree levels.