

## Students' Reflection Toward the Application of Peer Assessment Activity by Using Moodle-Based Workshop to Empower Learning Autonomy

Abdul Rosyid<sup>a\*</sup>, Lungguh Halira Vonti<sup>a</sup>

<sup>a</sup> Faculty of Teacher Training and Education, Universitas Pakuan, Bogor, Indonesia  
abdulrosyid@unpak.ac.id\*; lungguh@unpak.ac.id

\*Corresponding author

---

### Article Info

#### Article history:

Received Aug 12, 2022

Revised Oct 17, 2022

Accepted Oct 20, 2022

---

#### Keywords:

Learners' Autonomy;  
Peer Assessment;  
Moodle

---

### ABSTRACT

This research is an endeavor to portrait an effort to empower learners' autonomy through peer assessment activity by using Moodle-based workshop. The method employed in this study was descriptive case study. 30 students taken from one class were involved in this study as the participants. The data of the research was gathered through administering questionnaire and conducting focused group discussion. The instruments were designed to find the answer of the following question, i.e., to what extend does peer assessment activity using Moodle-based workshop empower learning autonomy? Peer assessment activity was applied in Text Based Structure Class focusing on the topic about English Clauses. Autonomous learning indicators that become the focus of this research are: a) determining the objectives, b) defining the content and the progress of learning, c) selecting appropriate methods and techniques, d) monitoring the applied techniques methods, and e) evaluating what has been achieved. The findings of this study reveal that peer assessment activity by using Moodle-based workshop can promote learners' autonomy. It is also discovered that the learners are able to learn from the exchanging inputs activities with their peers and most importantly they can access and review the inputs anywhere and anytime they desire.

*This is an open access article under the [CC BY-SA](#) license.*



---

## Introduction

Peer assessment is a topic discussed by many researchers and scholars for many years. The variety of platforms, templates and frameworks creates a situation where peer assessment activity can be applied in all teaching and learning settings (M. Chang, et.al. 2019). Teachers and learners can earn some benefits from peer assessment activity. Students preserve to examine their solution with peers (De Alfaro, et.al., 2014), and feedback given in the process of peer assessment enhances students' performance by re-directing their focus on specific aspects of their work (Kulkarni et.al., 2014), and by exposing them to different perspectives and point of view.

Peer assessment can be a very advantageous pedagogy. However, it is not necessarily reliable, especially when completed by undergraduate student (Gielen et al., 2011). Logan,

(2009) states that students may find differences of time needed and support in applying self and peer assessment, yet it is effective to improve their skills in reflective practice. This style of assessment can help the lecturers to save the time from doing the assessment from the very beginning. Additionally, teachers gain from peer assessment by having a reduced and more focused evaluation workload. This is particularly true when peer assessment is used to build a learner model, which enables teachers to identify at-risk students, or when it is used to automatically assign grades with only minimal teacher input or calibration.

Learning management systems (LMS), such as the well-known and widely used Moodle platform, have begun to integrate peer assessment. In Moodle, teachers can use different kinds of assessment tools like assignments, quizzes or workshops. One of the features in LMS that can support peer assessment activity is Workshop. The Workshop extension plugin, which is a module based on sessions in which students submit their own work and evaluate the work of peers in accordance with teacher guidelines, supports the peer assessment functionality. In addition, the Workshop activity enables the collection, review, and peer assessment of students' work. Students can submit their work as an online text by entering content directly into a text box on the workshop submission page. This feature is useful for short papers or brief paragraphs. Therefore, this feature is commonly used in writing classes. The following are the pictures of Workshop based Moodle applied in this study.

**Week 10#: Workshop on Noun Clause**

**Closed**

Setup phase	Submission phase	Assessment phase	Grading evaluation phase	Closed
Switch to the setup phase ○	Switch to the submission phase ○	Switch to the assessment phase ○	Switch to the evaluation phase ○	Current phase ●
<ul style="list-style-type: none"> <li>✓ Set the workshop description</li> <li>✓ Provide instructions for submission</li> <li>✓ Edit assessment form</li> <li>✓ Prepare example submissions</li> </ul>	<ul style="list-style-type: none"> <li>✓ Provide instructions for assessment</li> <li>✓ Allocate submissions expected: 18 submitted: 16 to allocate: 0</li> <li>ⓘ There is at least one author who has not yet submitted their work</li> <li>ⓘ Open for submissions from Monday, 7 December 2020, 1:10 PM (678 days ago)</li> <li>ⓘ Submissions deadline: Monday, 7 December 2020, 6:30 PM (678 days ago)</li> <li>ⓘ Late submissions are allowed</li> <li>ⓘ Time restrictions do not apply to you</li> </ul>	<ul style="list-style-type: none"> <li>ⓘ Open for assessment from Monday, 7 December 2020, 6:30 PM (678 days ago)</li> <li>ⓘ Assessment deadline: Monday, 7 December 2020, 8:20 PM (678 days ago)</li> <li>ⓘ Time restrictions do not apply to you</li> </ul>	<ul style="list-style-type: none"> <li>✗ Calculate submission grades expected: 18 calculated: 15</li> <li>✗ Calculate assessment grades expected: 18 calculated: 12</li> <li>✗ Provide a conclusion of the activity</li> </ul>	

Figure 1. Workshop based Moodle applied in this study

First name / Surname	Submission / Last modified	Grades received	Grade for submission (of 80)	Grade for assessment (of 20)	
Syahrani Ayu Sabila	Noun Clause modified on Monday, 7 December 2020, 6:17 PM	- (-)< Nurul Aeni 80 (20)< Andanti Nur Fahira - (-)< Muhammad Rafli Hadwijaya 80 (20)< Melani Dwy Punjani 80 (20)< Noor Amartya Rusgiani	80	75 (19)> Muhammad Rafli Hadwijaya 77 (18)> Vinka Putri Milenia 53 (19)> Nurmartya Ning Trias 80 (20)> Melani Dwy Punjani - (-)> Dian Ramadani	19
Yunila Dwirahmawati	No submission found for this user	-	-	80 (20)> Rosa Siti Hajar	20
Radityo Ahmad Dzulfiqar	No submission found for this user	-	-	-	-
Andanti Nur Fahira	NOUN CLAUSE modified on Monday, 7 December 2020, 4:11 PM	- (-)< Nurul Aeni - (-)< Nurmartya Ning Trias 72 (18)< Dian Ramadani 80 (20)< Neilan Sabila Awaludin 67 (18)< Indah Cahyaning Suryani	73	- (-)> Nurul Aeni 80 (20)> Syahrani Ayu Sabila 51 (19)> Vinka Putri Milenia - (-)> Raihana Khairunisa Nurahman 43 (20)> Noor Amartya Rusgiani	20
Muhammad Rafli Hadwijaya	Noun clause modified on Monday, 7 December 2020, 5:08 PM	75 (19)< Syahrani Ayu Sabila - (-)< Nurul Intan Khumairoh 45 (18)< Vinka Putri Milenia 61 (20)< Raihana Khairunisa Nurahman 67 (18)< Melani Dwy Punjani	62	- (-)> Nurul Aeni - (-)> Syahrani Ayu Sabila - (-)> Nurul Intan Khumairoh - (-)> Nurmartya Ning Trias - (-)> Raihana Khairunisa Nurahman	-
Rosa Siti Hajar	Noun Clause modified on Monday, 7 December 2020, 6:21 PM	80 (20)< Yunila Dwirahmawati - (-)< Nurul Intan Khumairoh 64 (17)< Vinka Putri Milenia 80 (20)< Sulistiawati Nurhelfa 75 (20)< Ananda Nurul Salma	75	- (-)> Nurul Intan Khumairoh - (-)> Raihana Khairunisa Nurahman - (-)> Sulistiawati Nurhelfa - (-)> Ananda Nurul Salma - (-)> Indah Cahyaning Suryani	-

Figure 2. Peer assessment process by using Workshop Based Moodle

Workshops featured in Moodle offered the students a valuable opportunity to form a community of collaborating individuals with a common goal, which they jointly strove to achieve (Bouziane, A., & Zyad, H., 2018). In this study, the field of the research was writing and it is found out that peer and self-assessments have significant contributions to students' language learning process. How to ensure that the students actively participate in peer review activities is one of the issues that has come into question. Moodle can be a valuable platform for students to increase their connection with both their instructor and their classmates during the learning process, offering an alternative solution to the issue.

The connectivity among the students and the teachers along teaching and learning process by using Workshop based Moodle can become a stepping stone for the students to be autonomous learners. Littlewood (2015) mentioned two major characteristics of autonomous learning, they are: first, the students take the responsibility of their own learning, and second, the responsibility itself includes all of the aspects of the students' learning. He further emphasizes five indicators of autonomous learning, the following are: a) determining the objectives, b) defining the content and the progress of learning, c) selecting appropriate methods and techniques, d) monitoring the applied techniques methods, and e) evaluating what has been achieved. Related to peer assessment, Tsui and Ng (2000) identified four functions of peer comments that contributed positively to the EFL writing process, among which raising learners' awareness and owning autonomy over the subject matter are both features of agency required for an autonomous learner. Moreover, Shen, et.al. (2020) investigated the effect of peer assessment on learner autonomy. In his study, the result showed that peer assessment enhanced the students' learner autonomy. Besides, peer assessment significantly reduced learners' dependence on the teacher and boosted the students' confidence in learning ability. The study conducted to seventy English major sophomores from an independent college in China was done in writing class.

Seeing the previous studies, it appears that there are some gaps. First, there has never been any research on using technology to undertake peer assessment. Second, the study about peer assessment and the influence of it on students' learning autonomy is mostly conducted in writing class. There is no any study yet about those issues in the specific element of writing, which is grammar. Thus, the researchers intended to investigate the extend peer assessment activity applied in grammar class, especially in learning English Clauses empowers learning autonomy since this case merits further empirical investigation.

## Method

The research was conducted to the fifth semester students of English Education Study Program, Universitas Pakuan, located in Bogor, West Java, Indonesia. 30 students from one class got involved in this study. The class was chosen since in this class Peer Assessment Activity by using Moodle-Based workshop was applied. Descriptive case study was employed in this research since the researchers are interested to investigate the phenomena happened in a specific teaching and learning process. Questionnaire and Focused Group Discussion are two ways applied in gathering the data. Talking about questionnaire, there are five indicators, namely 1) Evaluation of teachers' aims and requirements, 2) Evaluation of establishing studying goals and plans, 3) Evaluation on strategies implementation, 4) Evaluation of ability to monitor the usage of pronunciation strategies, and 5) Evaluation of learning process. The questionnaire that consisted of 23 closed statements was adapted from Genc (2015). To avoid misunderstanding, Bahasa Indonesia was used in the questionnaire. In order to support the data collected from questionnaire, Focused Group Discussion (FGD) was conducted. Due to the current condition, FGD was conducted through Zoom Meeting App. The researchers invited the observers and all students to talk and discuss what happened in online class session. The researchers' main aim was to gather more depth information regarding the roles of Peer Assessment Activity by using Moodle-Based workshop in promoting students' autonomous learning.

The data collected from questionnaire are calculated statistically and analyzed in order to get the information dealing with the role of peer assessment activities by using Moodle-based workshop toward students' learning autonomy. Furthermore, all the information from FDG transcribed and coded for analysis. The data from FGD served to further strengthen the analysis from the aforementioned instrument.

## Results and Discussion

### *Data from Questionnaire*

The researchers administered questionnaire through online platform. The purpose of doing this activity is to gather information about the role of peer assessment activities by using Moodle-based workshop toward students' learning autonomy. The following is the recapitulation of the questionnaire.

Table 1. The Result of Questionnaire

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<b>A. Evaluation of Teacher's aims and requirements</b>					
<i>Saya memahami tujuan pembelajaran English Clauses.</i> I understand the purpose of learning English Clauses.	45.9%	37.8%	13.5%	2.7%	-

<i>Saya mengetahui dan memahami hal-hal yang harus saya persiapkan sebelum mengikuti mata kuliah English Clauses.</i>	35.1%	48.6%	16,2%	-	-
I know and understand things I need to prepare before taking the English Clauses course.					
<i>Saya mampu menyusun sendiri tujuan dari belajar English Clauses.</i>	8.1%	51.4%	35.1%	5.4%	
I am able to set my own goals for learning English Clauses.					
<i>Saya benar-benar memahami tujuan yang ingin dicapai oleh dosen saya dalam proses pembelajaran English Clauses.</i>	32.4%	48.6%	16.2%	2.7%	-
I really understand the goals that my lecturer wants to achieve in the process of learning English Clauses.					
<i>Selama proses pembelajaran English Clauses, saya dapat mengikuti ritme belajar yang diterapkan oleh Dosen saya.</i>	32.4%	56.8%	10.8%	-	-
During the learning process of English Clauses, I can follow the learning rhythm applied by my lecturer.					
<b>B. Evaluation of Establishing Study Goals and Plans</b>					
<i>Diluar tugas yang diberikan, saya selalu memiliki perencanaan yang terstruktur untuk belajar secara mandiri.</i>	8.1%	32.4%	54.1%	5.4%	-
Outside of assigned tasks, I always have a structured plan for self-study.					
<i>Selama belajar English Clauses, saya menentukan tujuan saya sendiri berdasarkan level kemampuan saya.</i>	18.9%	51.4%	29.7%	-	-
While studying English Clauses, I set my own goals based on my ability level.					
<i>Saya mahir dalam menyusun rencana belajar yang sesuai dengan perkembangan saya.</i>	2.7%	32.4%	52.1%	10.8%	-
I am good at putting together a study plan that suits my development.					
<i>Saya mahir dalam mendesain jadwal kegiatan yang mendukung pembelajaran English Clauses.</i>		35.1%	59.5%	5.4%	-
I am proficient in designing activity schedules that support English Clauses learning.					
<b>C. Evaluation of the Learning Strategy's Implementation</b>					
<i>Saya benar-benar memahami tentang strategi belajar English Clauses.</i>	2.7%	45.9%	37.8%	13.5%	-
I really understand about English Clauses learning strategies.					
<i>Saya mampu menerapkan strategi yang efektif untuk meningkatkan kemampuan English Clauses saya.</i>	8.1%	54.1%	27%	10.8%	-
I am able to apply effective strategies to improve my English Clauses skills.					
<b>D. Evaluation of Ability to Monitor the Usage of Learning Strategies</b>					
<i>Saya mampu memonitor strategi yang saya terapkan dalam belajar English Clauses.</i>	5.4%	54.1%	37.8%	2.7%	-
I am able to monitor the strategies that I apply in learning English Clauses.					
<i>Saya menyadari dan mengetahui apakah strategi yang saya terapkan efektif atau tidak.</i>	13.5%	48.6%	32.4%	5.4%	-
I am aware and know whether the strategy I apply is effective or not.					

<i>Saya mampu mengidentifikasi dan menyelesaikan masalah yang saya temukan pada metode pembelajaran English Clauses yang saya terapkan.</i>	5.4%	56.8%	32.4%	5.4%	-
<i>I am able to identify and to solve problems that I find in the English Clauses learning method that I apply.</i>					
<i>Ketika saya menemukan bahwa strategi yang saya terapkan tidak efektif, maka saya akan mencoba strategi yang lain.</i>	29.7%	51.4%	16.2%	2.7%	-
<i>When I find that the strategy, I apply is not effective, then I will try another strategy.</i>					

#### **E. Evaluation of English Clauses Learning Process**

<i>Diluar kelas, saya memanfaatkan berbagai kesempatan untuk berlatih English Clauses.</i>	10.8%	54.1%	32.4%	2.7%	-
<i>Outside of class, I take advantage of various opportunities to practice English Clauses.</i>					
<i>Saya berusaha untuk menyelesaikan masalah emosional seperti rasa malu, khawatir dan takut yang dapat menghambat proses pembelajaran English Clauses.</i>	48.6%	35.1%	13.5%	2.7%	-
<i>I try to solve emotional problems such as shyness, worry and fear that can hinder the learning process of English Clauses.</i>					
<i>Saya menggunakan sumber-sumber baik online ataupun offline untuk meningkatkan kemampuan English Clauses saya.</i>	29.7%	48.6%	21.6%	-	-
<i>I use resources both online and offline to improve my skills toward English Clauses.</i>					
<i>Saya sering belajar English Clauses bersama teman-teman saya.</i>	18.9%	21.6%	48.6%	8.1%	2.7%
<i>I often study English Clauses with my friends.</i>					
<i>Ketika sedang berlatih English Clauses, saya mengetahui kesalahan yang saya buat dan berusaha membetulkannya.</i>	56.8%	37.8%	5.4%	-	-
<i>When I was practicing English Clauses, I realized the mistakes I made and tried to correct them.</i>					
<i>Ketika saya melakukan kesalahan dalam English Clauses, saya menyadari penyebab terjadinya kesalahan tersebut, seperti Pengaruh Bahasa sehari-hari, kurangnya latihan yang intensif, atau belum memahai cara membuat English Clauses yang benar.</i>	73%	24.3%	2.7%	-	-
<i>When I make mistakes in English Clauses, I realize the causes of these errors, such as the influence of everyday language, lack of intensive practice, or not understanding how to make English Clauses correctly.</i>					
<i>Saya memilih metode yang efektif untuk menjadi Pembelajar English Clauses yang lebih baik.</i>	40.5%	48.6%	10.8%	-	-
<i>I choose effective methods to become a better English Clauses Learner.</i>					
<i>Selama proses mengerjakan salah satu tugas, saya selalu memastikan bahwa saya memahami materi yang telah diberikan sebelumnya.</i>	29.7%	64.9%	2.7%	2.7%	-
<i>During the process of completing one of the assignments, I always make sure that I understand the material previously explained by the teacher.</i>					

### *Data from Focused Group Discussion*

The second step in gathering required information, as it is explained it advance, is through Focused Group Discussion (FGD). The researchers, the observers and also the students were involved in this FGD. The main objective of this activity is to get more in-depth information dealing with the roles of peer assessment activity in promoting students' learning autonomy. The following are some students' opinion recorded from FGD.

#### Excerpt 1

*Penggunaan fitur Workshop yang terdapat pada LMS dalam pembelajaran English Clauses sangat membantu saya untuk lebih memahami materi tersebut.*

[The use of Workshop feature in LMS **does help me to comprehend the material** about English Clauses]

#### Excerpt 2

*Semenjak belajar English clauses dengan menerapkan teknik penilaian sejawat membuat saya lebih memahami materi dengan menganalisis kalimat yang dibuat oleh teman saya dan mengetahui penilaian dari teman saya tentang kalimat yang saya buat.*

[Since I learn English clauses by using Peer Assessment Activity, **my comprehension toward the material becomes sharper. Analyzing the sentences constructed by my peers and paying attention to my peer's inputs toward my sentences really help me to understand the topic being discussed.**]

#### Excerpt 3

*Penilaian sejawat membuat saya semakin semangat untuk mempelajari materi. Hal ini karena saya bisa mempelajari setiap masukan dari rekan sejawat saya.*

[Peer assessment helps me to be more enthusiastic to learn. This is the result of the condition **where I can learn from the inputs given by my friend regularly and autonomously.**]

#### Excerpt 4

*Penilaian dari sejawat membantu saya memahami kekurangan dan kesalahan saya dalam membuat klausa dalam Bahasa Inggris dan ini semakin membantu meningkatkan kemampuan saya dalam membuat kalimat Bahasa Inggris dengan benar.*

[Peer assessment activity **helps me to identify the weakness and the mistakes I made in constructing English clauses.** It also supports me to empower my ability in constructing English sentences correctly.]

#### Excerpt 5

*Belajar English Clauses dengan memanfaatkan media LMS dan juga penilaian teman sejawat sangat membantu saya untuk terus belajar dari kesalahan yang saya buat dan membantu saya mengakses materi serta masukan dari teman sejawat kapanpun dan dimanapun.*

[Learning the material about English Clauses by using LMS and peer assessment technique really **assists me to do self-assessment, learning from my own mistakes.** The media used also helps me to access the material and the inputs given by my peer wherever and whenever I desire.]

Seeing the table, it can be seen that almost in all sentences from all indicators most of the students (more than 75% from the total number of the students) are in positive sides. It implies that most of the students are in agreement that peer assessment activity applied using Workshop based- Moodle in learning English Clauses has given them a chance to be an autonomous learner. The students are able to evaluate the aims of teaching and learning process, to set their goals of learning, to apply the strategies they choose in learning the material, to examine the effectiveness of their own learning strategies, and to identify the

strengths and the weaknesses of the learning activity. This is shown that the students are able to take the responsibility of their own learning (Littlewood: 2015).

The result from FGD empowers the findings gathered from questionnaire. It is revealed from the excerpts that the application of peer assessment supports the students to overcome their problems in learning English Clauses and also prepares them to be good autonomous learners. Most of the students agree that peer assessment activity applied in Moodle gives them chance to learn anywhere and anytime they desire. All of the results are actually in accordance with the findings from the previous researchers; they are M. Yang, et. al., (2006), Mo (2007), Kuyyogsuy (2019) and Shen, et.al. (2020).

## Conclusion

In this paper we presented the students' voice toward the application of peer assessment using Workshop-based Moodle in learning English Clauses in empowering their autonomous learning. The data were gathered from questionnaire and focused group discussion. It is revealed that peer assessment activity using Workshop based-Moodle promotes students' learning autonomy. It is also discovered that through peer assessment activity students are able to evaluate their learning activities and to identify their strengths and weaknesses from the inputs given by their peers. Besides, peer assessment activities applied in Moodle also provides the students with the flexibility mode, which is the students have a freedom to access and to evaluate the inputs anywhere and anytime they desire.

## References

- Bouziane, A., & Ziad, H. (2018). The impact of self and peer assessment on L2 writing: The case of Moodle workshops. In *Assessing EFL Writing in the 21st Century Arab World* (pp. 111-135). Palgrave Macmillan, Cham.
- De Alfaro, L., Shavlovsky, M., Crowd Grader. (2014.) A Tool for Crowds Sourcing the Evaluation of Homework Assignments. In: *Proc. SIGCSE 2014*, ACM Press, pp. 415-420
- Gielen, S., Dochy, F., & Onghena, P. (2011). An inventory of peer assessment diversity. *Assessment & Evaluation in Higher Education*, 36(2), 137-155.
- Genc, G. (2015). Autonomous learning capacity of EFL student teachers. *International Journal of Languages' Education and Teaching*, 3(2), 23-42.
- Kulkarni, C. E., Socher, R., Bernstein, M. S., & Klemmer, S. R. (2014, March). Scaling short-answer grading by combining peer assessment with algorithmic scoring. In *Proceedings of the first ACM conference on Learning@ scale conference* (pp. 99-108).
- Kuyyogsuy, S. (2019). Promoting Peer Feedback in Developing Students' English Writing Ability in L2 Writing Class. *International Education Studies*, 12(9), 76-90.
- Logan, E. (2009). Self and peer assessment in action. *Practitioner Research in Higher Education*, 3 (1), 29-35.



- 
- M. Chang et al. (eds.) (2019) *Foundations and Trends in Smart Learning*, Lecture Notes in Educational Technology, [https://doi.org/10.1007/978-981-13-6908-7\\_19](https://doi.org/10.1007/978-981-13-6908-7_19)
- Yang, M., Badger, R., & Yu, Z. (2006). A comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of second language writing*, 15(3), 179-200.
- Shen, B., Bai, B., & Xue, W. (2020). The effects of peer assessment on learner autonomy: An empirical study in a Chinese college English writing class. *Studies in Educational Evaluation*, 64, 100821.
- Tsui, A. B., & Ng, M. (2000). Do secondary L2 writers benefit from peer comments?. *Journal of second language writing*, 9(2), 147-170.
- Littlewood, W. (2015). Defining and Developing autonomy in East Asian Contexts in Gulten Genc, "Autonomous Learning Capacity of EFL Student Teacher,". *International Journal of Languages' Education and Teaching*, 3(2), 23-42.