Autonomous Learning Capacity of University Students’ during the COVID-19 Pandemic

Vitri Angraini Hardi¹, Muhammad Syahrul Rizal², Iska Noviardila³

¹ University of Pahlawan Tuanku Tambusai; Indonesia; vitrihardi@gmail.com
² University of Pahlawan Tuanku Tambusai; Indonesia; syahrul.rizal92@gmail.com
³ University of Pahlawan Tuanku Tambusai; noviardil92@gmail.com

ABSTRACT
The research aimed to describe the students’ autonomous learning capacity during the COVID-19 pandemic. A descriptive quantitative research was conducted with 269 students of Education faculty, University of Pahlawan as the research sample that was selected through simple random sampling technique. The questionnaire was used as research instrument. The questionnaire with four Likert scale was distributed to the sample with five indicators. To analyze the data, the researcher used descriptive statistical analysis. The findings of the research were as follows: 1). The students agreed that they could formulate their own learning objectives. In addition, several learning activities designed are prepared to help them to reach the learning objective. 2). They agreed that they adjusted the study plan by considering personal needs, including the time schedule as detail as possible. 3). They claimed that they are acknowledged with learning strategy and implement it in the routine learning process intentionally. 4). The students reported that several changes were adapted in term of learning strategy if it is necessary as well as consider personal capability. 5). They agreed that monitoring and evaluation of the whole learning process is necessary. This study concluded that the integration of technology in learning process during COVID-19 pandemic is a positive thing.

This is an open access article under the CC BY-NC-SA license.

1. INTRODUCTION
Over the years, Indonesian students were educated in traditional classroom, face to face learning method. The teaching and learning process are delivered in the classroom at one time. Generally, the learning process involves two-ways interactions, student to student and student to teacher. However, the interaction between student and learning content is the most significant. The learning process keep...
running even the other first two interactions do not exist. Deep learning will occur even if the other two interactions are significantly reduced or minimized (Meulenbroeks, 2020). Thus, the learning that is conducted through online mode is emerged considering the student to student interaction is not significantly contribute to the learning success instead of students and learning content interaction.

Some scholars work for identifying, designing, and developing methodology by considering the future needs, students as well as teachers. The growth of technology becomes a hot issue due to its effect in the future of teaching methodology. Getting the mix of between traditional classroom and technology integration is commonly known as Blended learning. Meulenbroeks (2020) states that blended learning incorporates technology-based practice and physical setting interaction if it is necessary. It allows teachers to integrate elements of face-to-face teaching with online learning methods (Berga et al., 2021). It offers flexibilities, especially for the students. The students were allowed to repeat or review the learning materials as needed, receive immediate feedback, facilitate longtime learning, and access the learning process individually.

Currently, the teaching methodology is not even blended. Considering the global situation, where the spread of COVID-19 outbreaks is rapidly growth day by day, online learning is adapted as the methodology used in the current situation. It renders the learning situation significantly. The students and the teachers could not meet each other in face-to-face setting. Internet based learning transition is the alternative process that could be adjusted by the educators nowadays. Besides, the implementation of online learning as learning alternative is considered as the best way for doing lifelong learning (Omar et al., 2012). The learning materials could be accessed publicly and unlimited. Furthermore, online learning could change the role of teacher who is dominantly control the learning process that is known as teacher centered learning become students-centered learning. This is an opportunity to shape student’s behavior to be actively engaged in the learning.

Its positive impact stimulates the growth of online learning platform that serve students’ need that even could be accessed by people in all over the world (Lazăr, 2013). It is assumed that learning is unstoppable process. By having online learning, people from various of ages, different cultures, various countries could learn together as long as needed by themselves (Najeeb, 2013).

Furthermore, it leads to the emergence of learning autonomy. Learner autonomy becomes the fundamental concept of education in today’s online learning (Yagcioglu, 2015). The students could not reach the learning outcome if they are not aware with their responsibilities. Students who do not consider their responsibility during class hours will be easily demolish the enthusiasm and transfer negative energy to other students who intend to learn.

In formal educational context, learner’s autonomy entails planning, implementing, monitoring, and evaluating learning (Karababa et al., 2010). Trebby cites in Najeeb (2013) argues that taking charge is one’s own learning is a prerequisite of learning. The learning will be difficult to be implemented without the learner actually taking charge (Haddad, 2016). However, learner autonomy is double process; the students have to learn the material and the students have to learn how to learn. It involves personal enthusiastic to take a responsibility in learning unless the learning outcome will not be successful (Ertürk, 2016).

Some researchers have conducted research about autonomy learning in online class. Ariebowo (2021) states that the students aware the learning objectives that correspond by the teacher in online class. The students could easily take participation enthusiastically during the learning. The students’ preferences in online learning showed how autonomous they are. Muhammad (2020) adds that school is successfully promoting students autonomy learning after implementing online class. The students confirmed that online class creating flexibility to the students. The students could adjust learning setting and learning materials based on their preferences. On the contrary, Oktoberlina & Muslimin (2021) found that online learning creates the difficulties for the students to get correspondences with the teachers. The students feel that teachers’ feedback on student’s strengths and weaknesses in learning is necessary. Meanwhile, online class considers break teachers’ role as evaluator in the teaching and learning process.

Vitri Angraini Hardi, Muhammad Syahrul Rizal, Iska Noviardila / Autonomous Learning Capacity of University Students’ during the COVID-19 Pandemic
In this study, the researchers want to explore students’ autonomy capacity from various disciplines in teachers and training education faculty in which they were coming from different lecturers and different courses. Research about autonomy learning capacity is necessary to be conducted considering the probability to adapt the learning medium in two forms in the near future. The positive effect that is considered in online class could become the strong consideration for educational experts to adapt the new learning medium. The aim of Indonesian education that created student-centered could be easily formulated in online class.

The notion of learner autonomy in online learning is significantly contribute to the students’ successful in the learning. Considering the significant contribution of autonomy learning, the researchers are enthusiastic to carry out the research especially at university level. It is expected that university students in University of Pahlawan Tuanku Tambusai have good capacity in autonomy learning.

2. METHODS

This is a quantitative research with survey method used. The participants were the students of the fifth semester undergraduate study programs in Teachers Training and Education faculty, at University of Pahlawan Tuanku Tambusai namely Elementary School Teacher and Education department, Mathematics Education Department, English Language Education department, and Physical and Sport Science department. The number of participants were 269 students; 135 students from Elementary school teacher and education department, 61 students from Physical and Sport Science department, 52 student from English Language Education department, and 21 student from Mathematics Education Department. It was 193 female student and 76 male students with the age of 19 to 21 years old. The research was conducted from February to July 2021.

To get the data of the research, the questionnaire with 4 Likert scale from agree to disagree was employed. The questionnaire was validated by the experts on its content and the language used as well. There were 26 statements. The statements were composed based on autonomy learning activity, such as students capability in understanding learning objective, preparing personal study plan, implementing learning strategy, monitoring learning strategy, and evaluating learning activities (Genç, 2015). The questionnaire was distributed to the students via online through Google form. The data obtained from the questionnaire were grouped into each indicators of autonomy learning. After grouping the data, the researchers did descriptive statistical analysis manually. The minimum and maximum score of the data in each indicator were selected and categorized.

![Figure 1. Research Framework](image-url)
3. FINDINGS AND DISCUSSION

The questionnaire was distributed to the students through WhatsApp in form of Google form. The questionnaire was analyzed by using 4-liker scale. The data were grouped into indicators. After grouping the data into indicators, the researchers found the mean of each items in each indicators. The minimum and maximum mean score per each indicator was reported as finding of the research.

It was reported from the questionnaire that the 1). The students agreed that they understand the learning objectives designed by the lecturers. The students could formulated their own learning objectives. In addition, several learning activities designed were prepared to help them to reach the learning objective. 2). They agreed that they had to formulate personal study plan. The students adjusted the study plan by considering personal needs, including the time schedule as detail as possible. 3). They agreed that they used effective learning strategy. The students claimed that they were acknowledged with learning strategy and implement it in the routine learning process intentionally. 4). They agreed that monitoring and evaluation had to be implemented to ensure the process. The students reported that several changes were adapted in term of learning strategy if it is necessary as well as consider personal capability. 5). They agreed that monitoring and evaluation of the whole learning process is necessary.

Table 1. Data Distribution on Students’ Autonomy Learning Capacity

| No | Indicator | Criteria                | Value | Frequency (Person) | Percentage | Score | Remark |
|----|-----------|-------------------------|-------|--------------------|------------|-------|--------|
|    |           |                         |       | Item1 | Item2 | Item1 | Item2 | Item1 | Item2 | Item1 | Item2 |          |
| 1  | Understand the learning objective easily | Strongly Agree | 4     | 125   | 46   | 46.47 | 17.1  | 500   | 184   | Agree |
|    |           | Agree                   | 3     | 141   | 205  | 52.41 | 76.2  | 423   | 615   |        |
|    |           | Disagree                | 2     | 3     | 17   | 1.12  | 6.32  | 6     | 34    |        |
|    |           | Strongly Disagree       | 1     | 0     | 1    | 0.38  | 0     | 1     |       |        |
|    |           | Total                   |       | 269   | 269  | 100   | 100   | 929   | 834   | Agree |
|    |           | Average                 |       | 3.43  | 3.08 |       |       |       |       |        |
| 2  | Designing and Implementing Personal Learning Objective and Timeline | Strongly Agree | 4     | 68    | 30   | 25.28 | 11.15 | 272   | 120   | Agree |
|    |           | Agree                   | 3     | 187   | 189  | 69.52 | 70.26 | 561   | 567   |        |
|    |           | Disagree                | 2     | 14    | 50   | 5.2   | 18.59 | 28    | 100   |        |
|    |           | Strongly Disagree       | 1     | 0     | 0    | 0     | 0     | 0     |       |        |
|    |           | Total                   |       | 269   | 269  | 100   | 100   | 861   | 787   | Agree |
|    |           | Average                 |       | 3.19  | 2.88 |       |       |       |       |        |
| 3  | Implementing Learning Strategy Effectively | Strongly Agree | 4     | 44    | 50   | 16.35 | 18.59 | 176   | 200   | Agree |
|    |           | Agree                   | 3     | 205   | 206  | 76.21 | 76.58 | 615   | 618   |        |
|    |           | Disagree                | 2     | 19    | 13   | 7.06  | 4.83  | 38    | 26    |        |
|    |           | Strongly Disagree       | 1     | 1     | 0    | 0.38  | 0     | 1     |       |        |
|    |           | Total                   |       | 269   | 269  | 100   | 100   | 830   | 844   | Agree |
|    |           | Average                 |       | 3.14  | 3.04 |       |       |       |       |        |
| 4  | Monitoring on Learning Strategies      | Strongly Agree | 4     | 68    | 49   | 25.28 | 18.21 | 272   | 196   | Agree |
|    |           | Agree                   | 3     | 192   | 184  | 71.37 | 68.4  | 576   | 552   |        |

Vitri Angraini Hardi, Muhammad Syahrul Rizal, Iska Noviardila / Autonomous Learning Capacity of University Students’ during the COVID-19 Pandemic
Learner autonomy is defined as someone’s responsibility to take charge in their own learning (Haddad, 2016, Masouleh & Jooneghani, 2012, Khotimah et al., 2019) The process involved starting from identifying, designing, implementing, monitoring, and evaluating the learning process that involved the students. Autonomy in learning does not indicate that the learning process is not controlled by the teachers, but rather than the students dominantly engage in learning. It means that, the teacher considered their role as facilitator in which the teacher designed the learning objectives, provided the learning activities, and implemented it. It was found in this research, most of students agreed that they could understand the learning objective designed by the teacher. In other words, the students earned by themselves, understood, and interpreted the objective. In addition, the students could think critically about the underlying assumption designed by the teacher that is involving in the course objective.

Lahar cites in (Karababa et al., 2010) argues that learner autonomy means taking responsibility for someone’s own learning, which signifies that the learners study on their own in a very effective way. It is in line with statement stated by Holec cites in Karababa et al., (2010) that there are three figures of autonomy learners: a). the student working independently of the teacher. The independent (autonomous) student can use the teaching materials presented to him/her wherever and whenever she or he desires without the need for the presence of the teacher. b). learner making decisions about their learning and actively participating in and contributing to the educational program that they take a part of. c). Possessed by the student. Autonomous learning is not a notion describing how learning is achieved but it is rather a characteristic of the individual. The data reported that most of the students agreed that they have ability to design personal study plan in which personal needs become the considerations. The students even could design the learning schedule, learning strategy to be used in learning.

It is in line with the research that conducted by Ariebowo (2021). It is added that online class gives opportunities to students to create their own learning. However, it could not be separated from positive correspondences of the teacher. Good correspondences in term of learning materials in curriculum easily direct the students in online learning. Muhammad (2020) also reported the similar findings adds that school is successfully promoting students autonomy learning after implementing online class. The students confirmed that online class creating flexibility to the students. The students could adjust learning setting and learning materials based on their preferences. On the contrary, Octaberlina & Muslimin (2021) found that online learning creates the difficulties for the students to get correspondences with the teachers. The students feel that teachers’ feedback on student’s strengths and weaknesses in learning is necessary. Meanwhile, online class considers break teachers’ role as evaluator in the teaching and learning process.

|                | Strongly Agree | Agree | Disagree | Strongly Disagree | Total |
|----------------|----------------|-------|----------|-------------------|-------|
| Learning Activities |                |       |          |                   |       |
| Monitoring and Evaluation | 4             | 75    | 42       | 27.88             | 300   |
| Total            |                | 269   | 100      | 100               | 866   |
| Average          |                |       | 3.21     | 3.01              |       |
| Strongly Disagree| 3              | 181   | 200      | 67.29             | 543   |
| Agree            |                |       | 74.35    | 54               | 600   |
| Total            |                | 269   | 100      | 100               | 869   |
| Average          |                |       | 3.33     | 3.04              |       |
| Disagree | 2             | 13    | 27       | 4.83              | 26    |
| Strongly Agree   | 3              | 181   | 200      | 67.29             | 543   |
| Average          |                |       | 74.35    | 54               | 600   |
| Strongly Disagree| 1             | 0     | 0        | 0                 | 0     |
| Agree            |                |       | 100      | 100               | 869   |
| Average          |                |       | 3.33     | 3.04              |       |

Vitri Angraini Hardi, Muhammad Syahrul Rizal, Iska Noviardila / Autonomous Learning Capacity of University Students’ during the COVID-19 Pandemic
4. CONCLUSION

The shifting of education medium from offline to online class requires students’ autonomy in learning. In addition, being autonomous student is necessary particularly for university students. The research conducted in Teachers Training and Education Faculty at University of Pahlawan Tuanku Tambusai reported that the students were having good autonomy capacity. It was reported that the students could adapt the learning process intentionally and efficiently. The students could manage their own learning in which causes students’ capability in designing personal study plan. Online learning could help the students to maximize the learning process. The students are given an opportunity to set their own role of learning.

REFERENCES

Ariebowo, T. (2021). Autonomous Learning during COVID-19 Pandemic: Students’ Objectives and Preferences. Journal of Foreign Language Teaching and Learning, 6(1). https://doi.org/10.18196/jftl.v6i1.10079

Berga, K. A., Vadnais, E., Nelson, J., Johnston, S., Buro, K., Hu, R., & Olaiya, B. (2021). Blended learning versus face-to-face learning in an undergraduate nursing health assessment course: A quasi-experimental study. Nurse Education Today, 96(May 2020), 104622. https://doi.org/10.1016/j.nedt.2020.104622

Ertürk, N. O. (2016). Language Learner Autonomy: Is it Really Possible? Procedia - Social and Behavioral Sciences, 232(April), 650–654. https://doi.org/10.1016/j.sbspro.2016.10.089

Genç, G. (2015). Autonomous Learning Capacity of Efl Student Teachers. International Journal of Languages’ Education, 1(Volume 6), 23–23. https://doi.org/10.18298/ijlet.483

Haddad, R. H. (2016). Developing Learner Autonomy in Vocabulary Learning in Classroom: How and Why can it be Fostered? Procedia - Social and Behavioral Sciences, 232(April), 784–791. https://doi.org/10.1016/j.sbspro.2016.10.106

Karababa, Z. C., Eker, D. N., & Arik, R. S. (2010). Descriptive study of learner’s level of autonomy: Voices from the Turkish language classes. Procedia - Social and Behavioral Sciences, 9, 1692–1698. https://doi.org/10.1016/j.sbspro.2010.12.386

Khotimah, K., Widiati, U., Mustofa, M., & Faruq Ubaidillah, M. (2019). Autonomous English learning: Teachers’ and students’ perceptions. Indonesian Journal of Applied Linguistics, 9(2), 371–381. https://doi.org/10.17509/ijal.v9i2.20234

Lazar, A. (2013). Learner Autonomy and its Implementation for Language Teacher Training. Procedia - Social and Behavioral Sciences, 76, 460–464. https://doi.org/10.1016/j.sbspro.2013.04.146

Masouleh, N. S., & Jooneghani, R. B. (2012). Autonomous learning: A teacher-less learning! Procedia - Social and Behavioral Sciences, 55(January 2012), 835–842. https://doi.org/10.1016/j.sbspro.2012.09.570

Meulenbroeks, R. (2020). Suddenly fully online: A case study of a blended university course moving online during the Covid-19 pandemic. Heliyon, 6(12), e05728. https://doi.org/10.1016/j.heliyon.2020.e05728

Muhammad. (2020). Promoting students’ autonomy through online learning media in efl class. International Journal of Higher Education, 9(4), 320–331. https://doi.org/10.5430/ijhe.v9n4p320

Najeeb, S. S. R. (2013). Learner Autonomy in Language Learning. Procedia - Social and Behavioral Sciences, 70, 1238–1242. https://doi.org/10.1016/j.sbspro.2013.01.183

Octoberlina, L. R., & Muslimin, A. I. (2021). Online learning: Students’ autonomy and attitudes. XLinguae, 14(1), 49–61. https://doi.org/10.18355/ XL.2021.14.01.04

Omar, N. D. @, Hassan, H., & Atan, H. (2012). Student Engagement in Online Learning: Learners Attitude Toward E-Mentoring. Procedia - Social and Behavioral Sciences, 67(November 2011), 464–475. https://doi.org/10.1016/j.sbspro.2012.11.351

Yagcioglu, O. (2015). New Approaches on Learner Autonomy in Language Learning. Procedia - Social
and Behavioral Sciences, 199, 428–435. https://doi.org/10.1016/j.sbspro.2015.07.529
Vitri Angraini Hardi, Muhammad Syahrul Rizal, Iska Noviardiila / Autonomous Learning Capacity of University Students’ during the COVID-19 Pandemic