



Komposis

Komposisi: Jurnal Pendidikan Bahasa, Sastra, dan Seni

> Volume 23 Nomor 1, 2022 page. 70-81

Article History:
Submitted:
February 24th,
2022
Accepted:
April 17th, 2022
Published:
April 17th, 2022

The Effectiveness of Using Answer Garden Application as Brainstorming Activity in Online Learning

Efektifitas Penggunaan Aplikasi Answer Garden Sebagai Aktifitas Brainstorming dalam Pembelajaran Online

Ance Jusmaya Universitas Sumatera Barat

Jl. Kol Haji Anas Malik ,Kota Pariaman, Sumatera Barat , Indonesia

*Corresponding author. Email: jusmayaance@gmail.com

Abstract

This study is based on the online teaching experience where the learning process becomes less interactive, and the atmosphere during the online learning process is monotonous. Given this fact, the researcher was interested in applying an app that appears to be suitable for helping students improve their writing skills in online learning, called Answer Garden. The purpose of this study was to address the issues faced by lecturers in teaching writing at the University in Batam. Answer Garden is a new minimalist feedback tool for stimulating real-time student engagement, online brainstorming, and soliciting feedback in the classroom. The study applied qualitative research using observation forms, field notes, and questionnaires. The results show that using Answer Garden as a brainstorming activity in online learning performs well when students are motivated by concepts, as they can create lists, sentences, ideas, words, ideas or questions about a topic of writing in interactive ways. Thus, Answer Garden was seen as a great application to promote student participation during the online learning, because it can involve students brainstorming and collaborating on a topic question that the teacher asked during the online learning.

Keywords: Answer Garden, Online Learning, Brainstorming Activity, Writing

Abstrak

Penelitian ini didasarkan pada pengalaman mengajar online dimana proses pembelajaran menjadi kurang interaktif dan suasana selama pembelajaran online monoton. Melihat kenyataan tersebut, peneliti tertarik untuk menerapkan sebuah aplikasi yang dirasa tepat dalam meningkatkan kemampuan menulis mahasiswa dalam pembelajaran online. Aplikasi yang dimaksud bernama Answer Garden. Penelitian ini

© FBS Universitas Negeri Padang



bertujuan untuk memecahkan masalah yang dihadapi oleh dosen dalam mengajar menulis di perguruan tinggi di Batam. Answer Garden adalah aplikasi bisa digunakan untuk merangsang partisipasi dan interaksi mahasiswa secara real-time, curah pendapat online, dan mendapatkan umpan balik selama proses pembelajaran. Penelitian ini menggunakan pendekatan kualitatif dengan menggunakan lembar observasi, catatan lapangan, dan angket sebagai teknik pengumpulan data. Hasil penelitian menunjukkan bahwa menggunakan Answer Garden sebagai aktivitas Brainstorming pembelajaran online memberikan hasil yang baik di mana mahasiswa termotivasi oleh konsep karena memungkinkan mereka untuk mengembangkan frasa, pemikiran, kata, ide, atau pertanyaan tentang topik tulisan secara interaktif. Dengan demikian, Answer Garden dipandang sebagai aplikasi yang bagus untuk mendorong partisipasi mahasiswa selama pembelajaran online, karena dapat melibatkan mahasiswa untuk bertukar pikiran dan berkolaborasi pada pertanyaan topik yang diajukan dosen selama pembelajaran online.

Kata kunci: Answer Garden, Pembelajaran Online, Aktifitas Brainstorming, Menulis

Introduction

Teaching activities in universities today are strongly influenced by advances in information and ICT. In fact, the need to use technology in the classroom during online teaching must slowly become mainstream. It is a useful tool for teaching and learning in the 21st century. As such, the relationship between ICT and pedagogy is now a crucial area of research for some educational researchers who may be interested in exploring the benefits of incorporating technology into classroom pedagogy. Internet presence and the role of technology in education is a much-discussed topic. In fact, the emergence of various technologies in language teaching has more or less changed the teaching landscape in the classroom, providing teachers and students with the opportunity to easily access rich online learning and information connections. This is a challenge in the world of learning these days.

Today, some schools and universities are adopting online learning during the pandemic. Online learning is learning done online using learning apps and social networks. Online learning is learning that takes place through an available platform without a physical presence. All forms of learning content are distributed online, exchanges are conducted online, and tests are conducted online. This online learning system is supported by several applications, such as Google Classroom, Google Meet, and Zoom (Harandi, 2015). With online learning, teachers and students can study in different places at the same time.

Based on the observation that the reseracher conducted on students undergoing online learning, it was found that during online learning some students find online learning was very tiring, because there are too many tasks

that must be done in a short time. They also stated that sometimes feeling visual impairment due to the long duration of staring at a computer screen or mobile phone. In addition, some students also face difficulties in finance because they have to buy large credits for online quotas. As (Yuzulia, 2021) found that still studying online encountered many problems. Not only culture conditions for students who cannot complete follow the online learning system, and the technology issues such as the availability of learning facility. One thing, students also have lost motivation in the learning process. If the atmosphere in the online class is monotonous and the teacher is not creative, it will have an impact on students where students will become less understanding in depth, and a decrease in their level of thinking. It could be due to the inability of teachers to innovate in online learning today.

Indeed, ideally the learning process is when students are able to engage directly in interaction, discuss and process the material delivered by the teacher and are able to ask questions while observing and analyzing ideas that arise, so that eventually they do problem solving and get a detailed understanding of the material discussed. But the reality is that during online learning it becomes a very basic problem. Problems that are often felt by teachers during the teaching and learning process with online learning are the lack of student involvement in interaction, challenges in measuring the level of understanding of students regarding the material taught, as well as distractions that come from students themselves such as most during learning, students become passive learners, limitations to be able to engage in the quality, breadth, and depth of their learning (Hussein et al., 2020). Regarding this, it is necessary to do learning efforts to adapt this condition, so that the purpose of the learning process can still be achieved to the maximum. One of them is through the improvement of learning systems that are tailored to the needs of online learning itself.

According to (Hofer et al., 2021) the integration of digital technology into the teaching and learning process has a positive influence in creating cognitively interesting learning opportunities. In other words, Answer garden is able to provide greater flexibility during the learning process. In addition, the advantage gained is that the existence of an online learning environment will gradually allow students to be more creative in initiating more diverse ideas so that the quality of teaching will have the potential to produce high quality. In addition, online learning will help educators position themselves to improve learners' success and achieve better results from the courses taught. According to (Selvaraj et al., 2021) If online learning is taken seriously with good quality resources in accordance with existing standards, there is a chance that this system will develop and will play an important role in future education. As (Malik & Rana, 2020) state that online lectures can be more effective if the use of information and communication technology to carry out lectures using the internet runs a good system.(Aslan, 2021) adds that the impact of live online courses in this case is that teachers and students can simultaneously share text,

UNP JOURNALS

72

audio, images, screens and whiteboards in live online courses. Therefore, many interactive exchanges can be expressed in many different ways, such as live classes and live virtual classes

In the 21st century, students are expected to develop some life-related abilities, learning and literacy skills. Among them, technical literacy and effective communication skills are very important. First, students need to be able to access and use technology to survive in the digital age. To help improve literacy, teachers can use widely available and easy-to-use digital technology designed for teaching. Therefore, the challenge of online learning today is how with the advancement of the digital world, a teacher can still present interactive learning which is still able to improve students' literacy and communication skills, as well as improve their collaboration and critical thinking skills.

According to (Ulla & Perales, 2021) The use of platform applications can be an alternative to delivering interactive online classes. Ideally, every use of online applications or platforms in education must still consider the pedagogical aspects. One of the websites that teacher can use in order to create interactive learning is Answer Garden. Answer Garden is a website where teacher can write down questions then it will immediately create a link, and the students can click on the link and add it directly to the answers. The answer garden then collects all the answers together and generates a word cloud of answers. Therefore, this is a good way to gather all the students' thoughts and ideas in one place. For teaching and learning process, It can be a brainstorming and idea generation website. It is very suitable for learning vocabulary, brainstorming for an article, thinking about problems, etc. It is widely used in language teaching recently.

Answer Garden is a very simple online medium that can stimulate student participation in class in no time to create and update word clouds instantly. This media can also be applied as a brainstorming activity in online learning when teachers need feedback or responses from students to specific questions asked. it can also serve as an ice breaker for students to understand one another, or as an interesting way to introduce and build on other learning objective. As (Mark S. Ackerman, 1994) states that answer garden is a collaborative word cloud generator. This is an easy-to-use online tool for getting short answers from students. Answer Garden allows teachers to post warm-up questions at the beginning of the course, invite students to ask questions in class, or solicit feedback from students in lectures. This positive interaction benefits both teachers and students. As a result, teachers can track students' learning and collect development ideas, while students can learn from others, work actively in the classroom, and make their own voices. The key advantages of Answer Garden, it can be a great tool to promote student participation during the online learning. Even though only in a simple activity, in fact it can involve students brainstorming and collaborating on a topic question or statement that the teacher asked. In this website, the collective answers from students are shown in the word cloud generated through Answer Garden

The answering area can break the ice, establish a sense of intimacy with students in the early stages of learning, dilute the atmosphere, understand the children's previous understanding of the topic, and even serve as an opinion room. The answer garden is used to provide interactive feedback during the online learning process. For example, it can provide information feedback in the form of "why" the learner can answer correctly or incorrectly. Feedback that can increase the motivation of the learner cannot answer or respond as required, Appreciate feedback for positive information and be able to appreciate any effort made by learners. Not only do they know that they have completed the challenge, but they also have to feel that they are a winner. Therefore, in the online learning process, teachers can provide feedback as needed through the answering park, and arrange as needed to improve the effectiveness of the learning process. Answer garden can be good for teaching English, especially writing. Therefore, the researchers decided to find out the effectiveness of using Answer Garden as brainstorming activity in online learning.

Based on the literature review, many previous studies have conducted similar research to this research. The following studies are used by the researcher as a comparison as well as a reference in completing this research. First, (Mark S. Ackerman, 1994). He examines organizational memory in the answer garden from several perspectives; In terms of how the memory organization system in the answer garden. In this case, it concerns the technical aspects such as the software system in the answer garden application itself. The results showed that information technology such as the answer garden had an effect on increasing knowledge of the memory system because of its practicality. In addition (Pipek & Wulf, 2003) presents a case study where the Answer Garden approach was applied to encourage knowledge sharing in steel plant maintenance engineering. The results show that the application of the answer garden is actually able to help understand the many drawings and the long history of changing classification schemes in the context of steel mills. It is evident that the Answer Garden application is required as a domain specific requirement for technically mediated communication. From this relevant study, it is known that the answer garden application can be applied in the fields of engineering and organizational memory. The difference between this research and the research described above is the intent and purpose. This study aims to determine the effectiveness of using an answer garden in the context of teaching English in universities in online teaching. Therefore, the formulation of the problem OF this research is (1) how can the use of Answer Garden be applied as a brainstorming activity in online learning (2) how effective is the use of Answer Garden as a brainstorming activity in teaching writing during online learning? Therefore, the researcher hopes that this research can contribute to online English learning in universities

UNP JOURNALS

Research Method

The research design is descriptive research which involves collecting data related to the current state or phenomenon. This research used qualitative analysis to describe things as they are. According to (Bogdan, 2007) Qualitative research has the following characteristics, First, it has a natural setting and data. the point is that every observed event occurs in accordance with its natural conditions so there is no intervention from the researcher. Second, the data is described in the form of words and the sample taken is determined intentionally. Third, data is analyzed when collecting and interpreting data. Finally, it really depends on the context, because the context is the meaning and important concerns in qualitative approaches. So the focus is on understanding the unique and particular context.

In this research, data were collected through observations, field records and questionnaires. During the observation, the researcher used the observation checklist to help the collecting data. The researcher observes all the activities of writing during teaching learning process. The checklist consisted list of the students responses during the online learning process. . The field notes were used in conjunction with observations made by researchers from observations during the study period. To gain the data during observation, the researcher writes the events happening in the class. The purpose of applying the daily field note is to make the researcher remembers the facts and details that happened during observation. It is used to observe the implementation of Answer Garden as Brainstorming activity in online learning. Questionnaires are then given to students to find out what students think about the phenomenon in questions.

> Table 1. **Students' Responses Questionnaire**

No	Questions	Yes (√)	No (-)
1	Does online learning by using Answer Garden as brainstorming Activity that have been applied make you have a high willingness to take lessons?		
2	Can application Answer Garden applied have reduced errors in Learning?		
3	Does the online learning that has been done make it easier for you to Understand the learning material?		
4	Does online learning with answer garden application as brainstorming activity that have been applied make it easy for you to understand the material being taught?		

- Is online learning by using answer Garden that have been applied more interactive and very fun?
- 6 Is the time management given during the teaching online given too fast?
- 7 Does using the Answer Garden application during the online learning process make you more motivated to improve your achievement in paragraph writing class?
- 8 Does using the Answer Garden application during the online learning process can enhance your logical development individually?
- 9 Do you feel more valued when expressing your opinions when studying in online class?
- 10 Do you feel more courageous and enthusiastic to express ideas and opinions after studied online using the Answer Garden application?

Results and Discussion

The researchers conducted the research at Universitas Putera Batam. The research was conducted during the 2020-2021 academic year. During this semester the students did the online class where teaching and learning process without direct face to face between teachers and students, however just using Zoom application. The research was conducted during the second semester of the Paragraph Writing course class. Meanwhile, during the learning process as well as research, the researcher first designed a scenario in order to describe how the phenomenon of teaching paragraph writing took place. There are two scenarios made, the first scenario used by the researcher is online learning without using Answer Garden as brainstorming in the first half of the semester. Then, during the meeting after mid-term, the researcher applied online learning by using the Answer Garden as a brainstorming activity. During the semester, researchers conducted entire observations and field recordings to obtain data. After the first and second settings, the researchers went through the process of learning the writing topics of both settings, giving them questionnaires to answer based on their experience. The subjects of the questionnaire were about 20 students.

During the semester, the teaching writing process was rated as "fairly good". A score of 70 is displayed from 1 to 100 based on their average score on daily tasks. Their daily task scores are the sum of the 14 in-class tasks. If we

UNP JOURNALS

divide her daily task score into scenarios, the first scenario has a score of 60.10 and the second scenario has a score of 80.20. In each session, they have exercises to master this skill. Through practice, they learn a lot to ask, such as questions, starting with what, where, when, why, and how to write. They get theory from lectures, and lecturers guide them in writing, giving feedback, editing and revising. Repeat this step over and over in each meeting

Overall, the researchers found that students still had some significant difficulties with writing. From what the researchers found, the main obstacle they encountered had to do with what or what they wanted to write about. The project involves students' written knowledge, including content, thesis development, and relevance to the presentation of the topic. Also, a common problem faced by students is the problem of form, i.e. the arrangement or organization of the written form, which demonstrates the overall preparation of the correct writing structure for the type of text being written. In addition, student considerations in choosing the right words in expressing their ideas are also a problem faced by students. The researcher sees these things as factors that make opinions about writing, which affect their interest in learning, their motivation to learn. In fact, the situation becomes crucial when faced with the situation of online learning is indeed much demanded creativity of a lecturer in creating fun writing teaching. Without using brainstorming using answer garden students seem lack of enthusiasm in listening and listen to the teacher's explanation the material presented. As a result the teaching and learning process did not run well.

During the process of Observations and recordings made throughout the session, the researcher found some interesting facts. As in using Answer Garden as a brainstorming activity in online learning, it produces more positive results than teaching writing in online learning without using Answer Garden as a brainstorming activity. In the process at the beginning the researcher taught students to learn online without using an answer garden, the researcher explained the material about paragraphs and gave students writing assignments independently. In the early minutes, the learning went smoothly, the students seemed focused. Students are diligent and enthusiastic. These are ideal conditions for students. However, in the next session, some students were bored. When given a task as usual, although at first they did it, but then they looked sleepy and unmotivated during the learning process. In subsequent sessions, one or two students are even late for online classes, and some students are sometimes not online, or are constrained by the network where they cannot interact during the learning process. As a result, they miss the material presented in the lecture process. Some students were able to complete their writing assignments according to the instructions, but some were still confused and partially finished. The problem is because of limited time or lack of initiative to try to make good writing. Regarding this, students who are unable to complete their writing assignments will lose their daily scores. These findings

were obtained from observations and field notes from the first 7 sessions of online learning without brainstorming activities using Answer Garden as teaching paragraph writing.

For the second stage, the researcher taught students by using the answer garden application as a brainstorming activity in teaching writing during online learning. From the results of observations, initially it seemed that the students were diligent and enthusiastic when the lecturer gave theory and motivation as well as assignments. When the answer garden is applied as a brainstorming activity, the online class becomes more interactive, where students compete to express their ideas and the class atmosphere becomes more alive. Students are enthusiastic in providing feedback because the answer garden is an intuitive tool that has a word cloud to provide quick feedback related to the questions asked. in the learning process there is feedback from the whole class. For example, when discussing a topic that students will write about, such as the influence of social media on mental health. In brainstorming during online learning, the researcher asks questions in the answer garden such as What type of social media do you use most often, how often do you use it, what is the impact of social media, here students can enter as many answers as they like, and even add some answers. per person - but without duplicates. This is great for instantaneously sharing opinions in class on a subject, or voting on a specific oneword response. As a result, in the later writing steps, students find it easier to generate their ideas, explore, and develop what will be the topic in their paragraphs.

Using the answer garden as a brainstorming activity in online learning can actually make the class come alive. Students will feel the interaction of togetherness like offline learning in class as usual with answer garden researcher will be able to create creative and fun learning activities even though they are at home students still have the enthusiasm to learn and don't feel bored. In addition, the Answer garden can also be used as feedback which, if used at the beginning, can serve to take students' focus so that students can remember the material being studied. This is to reduce the feeling of boredom, sleepiness and boredom of students and student focus re-emerges. Feedback on the answer garden application is also useful so that students remember the material by being able to respond to questions or to see clearly and quickly which words or numbers have the most responses in the room. Broadly speaking, the use of the answer garden as a brainstorming activity in online learning can stimulate students' opinions before starting to write to see how students' knowledge compares their ideas with others. After data from observations and field notes were obtained, the researchers also collected data through questionnaires.

The procedure for implementing the Questionnaire is taken at the end of the meetings in the online learning process. Based on the data obtained through the questionnaire, the researchers found several supporting facts regarding the online writing learning process .The following is the result of the students

responses in the process of using Answer Garden as Brainstorming Activity in online learning in teaching writing.

Table 2 Results of Student's Questionnaires

Results of Student's Questionnaires							
Indicators	Item	Percentage of Answers		Total			
	Numbers						
		Yes	No				
Attention	1	90 %	10 %	100 %			
	2	70 %	30 %	100 %			
	3	100 %	0 %	100 %			
	4	90 %	10 %	100 %			
Relevance	5	100 %	100%	100 %			
	6	80 %	20 %	100 %			
Confidence	7	90 %	10 %	100 %			
	8	100 %	100 %	100 %			
Satisfaction	9	80 %	20 %	100 %			
	10	80 %	80 %	100 %			

From the table above could explain the results of the questionnaire containing the students' responses in the learning process. In the first indicator (attention) the data shows that almost all students agree that online learning by using the Answer Garden application as a brainstorming activity can increase their willingness and high enthusiasm to take part in online learning which is usually boring for them. Then the data also shows that almost some students do not agree with the statement that the use of the Answer Garden application has reduced errors in learning to write. In addition, all students also agreed with the statement that one of the conveniences they get in online learning is using the answer garden as a brainstorming activity, namely learning becomes more interactive, so that students find it easier to understand the learning material provided. Next, based on the second indicator, namely (relevance), here the questionnaire data shows that all students agree that online learning using Answer Garden is more interactive and very enjoyable for them. However, there were some students stated that the time given by the teacher to understand the material was very fast, this could be due to the rhythm of online learning which was felt to be different from offline learning. The next indicator is (selfconfidence), the questionnaire data shows that online learning with an answer garden makes students feel more valuable. This is because they can freely express opinions and questions without any judgment, however everyone has the right to an opinion. Next, Based on the next indicators (stratification), the questionnaire data shows that almost all students feel more valued when expressed opinions during online learning. In fact, It really has a positive impact in increasing students self-confidence.

The most striking thing is that students' responses to teaching writing using Answer Garden as a brainstorming activity in writing during online learning get a very positive response. In fact this application can help them to be more passionate, more competitive to understand and look enthusiastic about doing writing activities, and like writing. The finding relates with the research (Rachman, 2018) which found that Answer Garden presents a potential method for building organizational memory that can help people find answers to some questions. This is because Answer Garden is able to build memory easily . Therefore it can be used to be applied in the online learning activities in teaching writing where its process can make students be more active in developing their vocabulary and opinion ,because they can make associations between sentences based on the structure of their parts to maintain coherence in writing. This is line with the research of (Khairani et al., 2021) who found that there is a significant positive contribution between the use of the Answer Garden application toward student learning outcomes. It is evident from the results of the data analysis that there is an increase in student learning outcomes after used the Answer garden application during the COVID-19 pandemic. Answer garden can be very effectively used as a feedback during the learning process. Thus, Answer garden in brainstorming activities can guide students to learn better, improve learning efficiency, foster student motivation, make learning more fun and active, and make it easier for students to understand concepts and be consistent in online learning. The most important in online learning, answer garden can helps engage the class in a fun and interactive vibes. Therefore, students feel comfortable in doing the learning process.

Conclusion

Teaching writing in online learning will be better by using Answer garden as brainstorming activities. By using this application, students become more motivated to write because the answer garden application allows students to generate ideas, thoughts, and even questions about writing topics in an interactive way. This positive interaction benefits both teachers and students. As a result, teachers can track students' learning and collect development ideas, while students can learn from others, work actively in the classroom, and make their own voices. Thus, Answer Garden can be a great tool to promote student participation during the online learning. Even though only in a simple activity, in fact it can involve students brainstorming and collaborating on a topic question or statement that the teacher asked. This study can serve as a preliminary study for others wishing to study the teaching of writing. The researchers recommend further research into the effectiveness of using answer gardens more broadly.

References

Ackerman, M. S., & Malone, T. W. (1990). *Answer garden. A tool for growing organizational memory*. 31–39. https://doi.org/10.1145/91474.91485 Aslan, A. (2021). Problem- based learning in live online classes: Learning

- achievement, problem-solving skill, communication skill, and interaction. Computers and Education, 171(November 2020), 104237. https://doi.org/10.1016/j.compedu.2021.104237
- Bogdan, R. (2007). Qualitative Research for Education: An Introduction to Theories and Methods, 5th Edition. Pearson Prentice Hall.
- Harandi, S. R. (2015). Effects of e-learning on Students' Motivation. Procedia -Social and Behavioral Sciences, 181(October), 423–430. https://doi.org/10.1016/j.sbspro.2015.04.905
- Hofer, S. I., Nistor, N., & Scheibenzuber, C. (2021). Online teaching and learning in higher education: Lessons learned in crisis situations. Computers in Human Behavior, 121(November 2020), 106789. https://doi.org/10.1016/j.chb.2021.106789
- Hussein, E., Daoud, S., Alrabaiah, H., & Badawi, R. (2020). Exploring undergraduate students' attitudes towards emergency online learning during COVID-19: A case from the UAE. Children and Youth Services Review, 119(August), 105699. https://doi.org/10.1016/j.childyouth.2020.105699
- Khairani, S., Sesmiarni, Z., Zakir, S., & Melani, M. (2021). Kontribusi Penggunaan Aplikasi Answer Garden terhadap Hasil Belajar Siswa pada mata Pelajaran Simdig Kelas X di SMK negeri 1 Siabu Mandailing Natal Contribution Of Using Answergarden Application To Student Learning Outcomes In Class X. 1(7), 365–372. https://doi.org/10.36418/comserva.v1i7.40
- Malik, S., & Rana, A. (2020). E-Learning: Role, Advantages, and Disadvantages of its implementation in Higher Education. JIMS8I PInternational Journal of Information Communication and Computing Technology, 8(1), 403. https://doi.org/10.5958/2347-7202.2020.00003.1
- Mark S. Ackerman. (1994). Answer Garden: A Tool for Growing Organizational Memory. Massachusetts Institute of Technology.
- Pipek, V., & Wulf, V. (2003). Ecscw 2003. Ecscw 2003, June 2014, 0–20. https://doi.org/10.1007/978-94-010-0068-0
- Rachman, T. (2018). Augmenting Organizational Memory: A Field Study of Answer Garden. Angewandte Chemie International Edition, 6(11), 951–952., *3*, 10–27.
- Selvaraj, A., Radhin, V., KA, N., Benson, N., & Mathew, A. J. (2021). Effect of pandemic based online education on teaching and learning system. International Journal of Educational Development, 85(January), 102444. https://doi.org/10.1016/j.ijedudev.2021.102444
- Ulla, M. B., & Perales, W. F. (2021). Facebook as an integrated online learning support application during the COVID19 pandemic: Thai university students' experiences and perspectives. Heliyon, 7(11), e08317. https://doi.org/10.1016/j.heliyon.2021.e08317
- Yuzulia, I. (2021). The Challenges Of Online Learning During Pandemic: Students' *V oice*. *13*(1), 8–12.

E-ISSN 2548-9097 JOURNALS