

Erna1

by Artikel Erna

Submission date: 18-Apr-2023 01:55PM (UTC+0700)

Submission ID: 2068131921

File name: Artikel_Jadid_Erna_JEMS.pdf (488.94K)

Word count: 4841

Character count: 26965

EFL online learning during covid-19 outbreak: between comfort and preferences

Jadid Muanas, Erna Iftanti, and Susanto¹

¹English Department, Post Graduate Program IAIN Tulungagung

Article Info

Keywords:
online learning, covid-19, students' comfort and preferences

Abstract

Online learning during the Covid-19 outbreak is the only option for the students to carry on their learning. Consequently, a lot of responses emerge alongside its application such as inadequate infrastructure and no preparation for either teacher or students. This study focuses on students' responses toward their experience in online learning related to their preferences and comfort for their online platforms. The data was collected through an online survey of 30 graduate students of State Institute of (IAIN) Tulungagung. The students used phone and laptop to attend the class and used several platforms such as zoom, google classroom, Whatsapp, and others to have virtual meeting and classroom activities. Digital platforms, devices, and content delivery modes provided and used by the teacher matched with the students' preferences, however, the students were not still enjoying the instructional process. The huge problems in online learning were the lack of comprehensibility of the material and the low internet connection. On the other hand, online learning was judged positively in the area of flexibility, autonomy, and less expensive. In sum, the students expected to continue applying online learning after the outbreak with minimizing the drawbacks.

INTRODUCTION

Since the declaration of Covid-19 as a global pandemic, which started in Wuhan (Liu, Kuo, & Shih, 2020), it has changed all aspects of education (Iye & Aziz, 2020; Douglas, Katikireddi, & Taulbut, 2020; Sintema, 2020; Ali, 2020), which is in a normal situation, students could study directly with their teachers, now they have to face through virtual (online learning) (Adnan & Anwar, 2020). In Indonesia, either formal or informal schools are impacted by this pandemic so that they have to reform face-to-face learning with online learning platforms (Kompas, 15/10/2020; Tempo, 15/10/2020). It is carried out as a result of one of the health protocols of Covid -19, namely social distance and physical distance. Thus, EFL instruction in Indonesia is conducted in the students' own homes, which is well known as Study From Home (Surat Edaran Mendikbud? Nomor 15 Tahun 2020). To be socially and physically distanced among students and teachers, such a learning platform affects teachers and students to do the instructional activities in distance through online learning techniques. Students do not interact directly with their classmates and teachers as they used to be. Instead, they should be more independent in their learning process and activities. This further brings them to learn individually or learn autonomously. However, this EFL online learning leads to some comfort and preferences which indicate some needs and expectations among EFL students.

Studies related to online learning have become the focus of various researchers. Studies prove that online learning is the best solution to facilitate students' learning remotely (Dhawan, 2020; Chick et.al., 2020). Learning with this system emphasizes that the readiness of teachers and students is the most fundamental aspect (Ali, 2020; Daniel, 2020; Aliyyah, et.al, 2020). Students who are located in rural areas tend to experience internet access problems (Adnan & Anwar, 2020) and students feel less interested in the learning process (Lukman, et.al.,2020). Meanwhile, students who live in urban areas will feel more benefited (Basilaia & Kvavadze, 2020) and their online learning process will also be better. Hence, Aliyah et. al. (2020) concluded that the readiness of the infrastructure is the fundamental aspect to achieve learning targets.

The various studies that have been mentioned only focus on the online infrastructure and the readiness of the teachers and students, while the students' needs and expectation on specific elements for example students' preference and comfort for online platforms, and content delivery modes from the EFL students' lens have not been given much attention. This study complements the shortcomings of existing studies by mapping students' experiences and responses toward online learning during the Covid-19 period, especially on their needs and expectations. This research is based on the argument that even though online infrastructure has been fulfilled, but the students' needs and expectations toward the learning process are ignored, it is very difficult to attain learning targets. As a result, the discussions of students' needs and expectations toward online learning to make the learning process enjoyable, meaningful, and supportive is necessary.

LITERATURE REVIEW

Throughout 2020, the almost instructional classroom is being done with an online meeting. This is due to the COVID-19 in which all aspects of education are unable to hold directly face to face (Al Ghazali, 2020). To survive the wheels of the instructional process, the learning should inevitably switch with online platforms to invite the students more independent and autonomous. As Benson (1997) notes, the use of technology is related to the technical approach of fostering autonomy and self-access learning. The practical usage of video conferencing platforms such as Google Meet, ZOOM, Messenger, Google Meet, Skype, as well as learning management systems like Moodle, Blackboard, Google Classroom, Schoology, etc. have been encouraged to support students' learning in all possible manner during the study from home (Hasan & Khan, 2020; Adnan & Anwar, 2020; Krishnapatria, 2020; Al Ghazali, 2020; Dhawan, S., 2020; Kwesi E., Adu, E., Mawuko, D., Komla, Ansah, E.A., 2020).

Online learning which must be implemented by all of the students during the Covid-19 pandemic triggers them to be more independent and autonomous (Hasan & Khan, 2020; Al Ghazali, 2020), calls for various responses. Students who receive the advantages of online learning will respond positively. On the other hand, students who blame learning with online mood get a lot of disadvantages or barriers will justify negative. Hasan & Khan (2020) propose that online learning will contribute to having more advantages if it is enjoyable, comforting, flexible, secure, accessible, and cost less. Poor connectivity, lack of time, lack of support, no opportunity for interaction, no clarification of doubts and queries, no supportive materials are provided, no guidance is given for online platform, lack of comprehensibility of the concept, learning is teacher-directed only, learning is

the one-sided, and stressful and technical problem are those which contribute students respond negatively.

The study by Adnan & Anwar (2020) found that online learning cannot produce desired results in underdeveloped countries. The huge problem is due to the vast majority of students are missing an internet connection. Besides, with a good internet connection, students' perception of online learning is fruitful, moreover, it can encourage flexibility (Allo, 2020; Huang, R.H., Liu, D.J., Tlili, A., Yang, J.F., Wang, H.H., et al., 2020), cost-effectiveness (Yang & Cornelius, 2004), electronic research availability (Nambiar, 2020), ease of connection to the Internet (Krishnapatria, 2020), and well-designed class interface (Thampradit, 2020). Needless to say, the online classroom should promote quality and timely communications between students and teachers or lectures, availability of technical support, structured online class references or modules, and modifications to accommodate the conduction of practical classes (Nambiar, 2020).

METHODS

The present study explores EFL students' responses toward the experiences for their online learning during covid-19 which requires studying from home. To do so, the sample of this study is 30 graduate students of State Islamic Institute (IAIN) Tulungagung, Indonesia taking their major study in the English education department. All the surveyed students were currently experiencing online learning due to the spreading of covid 19.

An online survey that employs google form is used as the technique to collect the data about the students' responses toward their online learning. The items of the questionnaire are modified instruments of Hasan & Khan,2020. They proposed that the responses toward online learning are enjoyment for their learning, digital platform and devices used, most liked features of online platforms, the most disliked element of the online platform they were using, content delivery modes used by teachers, students' preferred content delivery modes, accessibility of good internet connectivity, students' perceived advantages of online learning, students' perceived disadvantages of online learning, and use of online learning after an outbreak. The data found through the survey were then analyzed based on the frequency of the students' responses and were expressed with percentages. Subsequently, they are analyzed descriptively.

FINDINGS AND DISCUSSION

The survey shows that 80% of the respondents are female and the rest are male. Female respondents are bigger than male, because the students in IAIN Tulungagung is dominated by female as reported in the central statistical agency of Tulungagung regency in 20 September 2019. The obtained data about students' comfort and preference of experiencing online learning during covid-19 is classified into six main points, namely EFL students' enjoyment, the digital platform, devices, and features of online learning, content delivery, acceccibility, advantages of online learning, and their preferences of using online learning.

1. EFL students' enjoyment

To know the students' responses toward online learning, the first questions proposed are their enjoyment. Unfortunately, 78,1% or the majority of the respondents were not enjoying online learning.

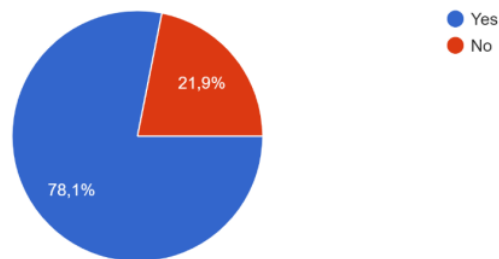


Figure 1: Students' enjoyment with online learning during covid-19

2. *The Digital Platform, Devices, Features Of Online Learning*

With the emerge of a bunch of digital platforms that support online learning, IAIN Tulunggung doesn't limit specifically instructors to what application used for their learning. In case, Zoom is the most frequent app used for virtual meeting and learning during this pandemic. Google Classroom was the second app and followed by Whatsapp.

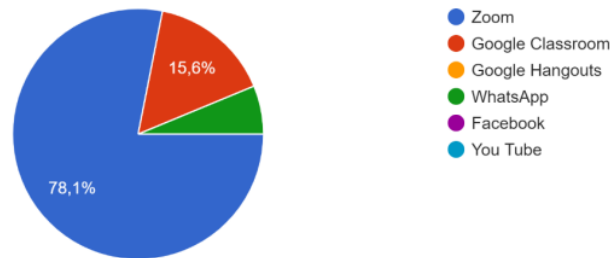


Figure 2: The digital platforms used for online learning

While the devices to access the digital platforms for online learning, the students prefer to use laptops followed by mobile phones. The features in laptop and mobile phone are not different so far. The features in the laptops can also be operated on a mobile phone. Hence, the percentage of the use of two devices is not different so far, mobile phones are 46,9% while laptops are 53,1%.

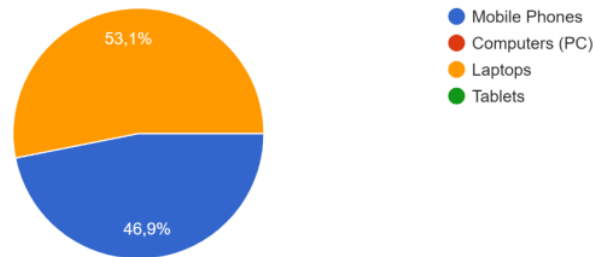


Figure 3: The devices used for online learning

Learning via online mood is unavoidable during this pandemic. Even though the students should quarantine, with online learning, the students are continually learning. In this study, 78,1% of students reported that the flexibility of online learning is the most features that they do like. Accessibility to content material position number two with 12,5%. Online platforms might be the alternatives to connect their friends, hence the percentage is on number three with below 10%. While self-paced is on number four of features that the students are most like. Unfortunately, there are no students who feel comfortable with digital platforms for online learning. While the students were asked what are the most disliked features of online learning, almost they agreed that poor comprehensibility and network connection is the most troublesome one. 43,8% of students were experiencing poor comprehensibility toward the content of the learning. Internet connection was also faced by the students 40,6%. While the rest 15,6%, the features of online learning don't contribute to good interaction between teacher and students or among students.

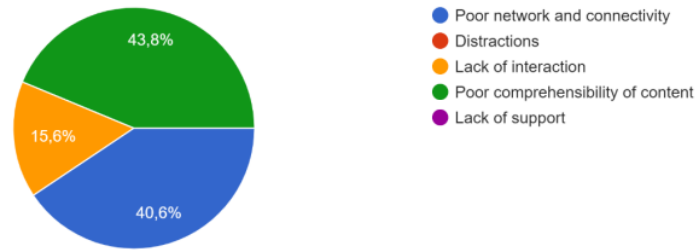


Figure 4: The most dislike features of online platforms

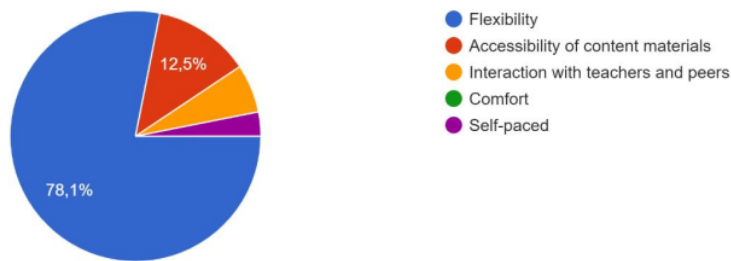


Figure 4: The most like features of online platform for learning

3. Content Delivery

During this pandemic, the content delivery mood in IAIN Tulungagung especially for graduate programs finished online. Video conferencing was the highest percentage 59,4% that was used. This was a match with the students' want. They preferred content delivery mood using video conferencing 75%. Besides video conferencing, the teacher adopted a textbook for conducting online learning 28,1%. The students' wanted that the teacher made text material directly 15,6%.

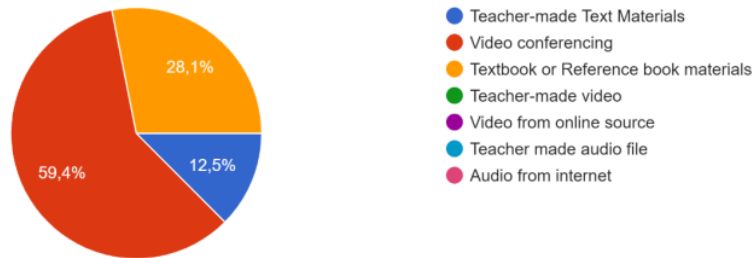


Figure 5: Content delivery mood used by the teacher

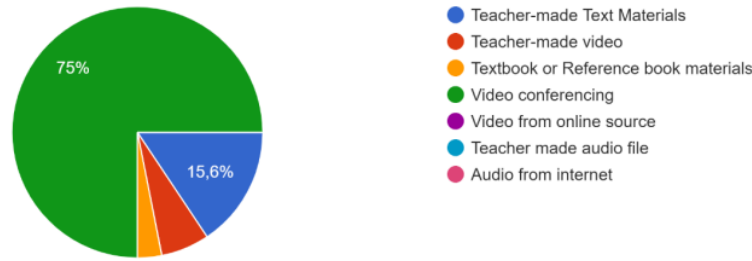


Figure 6: Content delivery mood preferred by the students

4. *Acceccibility*

Certainly, internet connection is a very crucial role due to online learning is impossible without an internet connection. Unluckily, internet connectivity is still the highest problem faced by the students, only 31,3% of students have good internet connectivity.

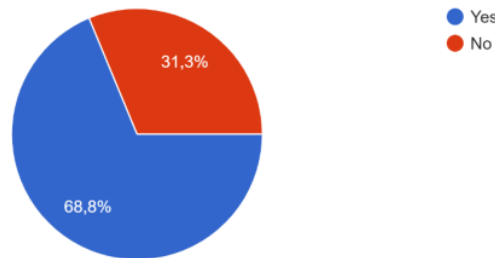


Figure 7: Accessibility of internet connectivity

5. *Advantages and disadvantages of Online Learning*

Online mood contributes some advantages to the students during this outbreak. 93,8% of students approved that online learning was more flexible. It could be done anywhere (90,6%) and anytime (87,5%), in which it was an available internet connection. Surprisingly, with online learning, students were more autonomous 87,5%. They could also access materials provided by instructors 90,6). However, they disagreed that online learning made the communication between teacher and students to be more intensive than face-to-face learning (46,9%). When discussing online learning, it is quite closely related to cybersecurity. Before starting online mood, guidance for online safety and security is a prerequisite. 51,6% of students were helped how to use online learning with safe and secure. Of course when online learning, students do not need to come to university. They can do it in their home. Online learning could save traveling for their learning (87,5%).

Table 1: Advantages of online learning

Advantages	Percentage
I can learn anytime according to my convenience	87,5%
I can learn from anywhere	90,6%
I can access materials provided by instructors	90,6%
It is highly flexible for me	93,8%
I feel more autonomous while learning online	87,5%
Teachers are more friendly online than face-to-face teaching	46,9%
Proper guidance for online safety and security is given	51,6%
Others: Save travelling expenses	87,5%

Not only for advantages of online learning, but the students were also asked about disadvantages of online learning. The majority of the students were lack of comprehensibility (87,5%) when having online learning. In case, students proposed the teacher was only giving a task (80,6%) with a lack of theoretical explanation, while the teaching mode was teacher-directed only (61,3%). Hence, the students experienced no opportunity for interaction (68,8%), no clarification of doubts and queries (65,6%), no supportive material were provided (71,9%), and no guidance for how to use an online platform (71,9%).

Table 2: Disadvantages of Online Learning

Advantages	Percentage
Lack of time	56,3%
Lack of support	58,1%
No opportunity for interaction	68,8%
No clarification of doubts and queries	65,6%
No supportive materials are provided	71,9%
No guidance is given for online platform	71,9%
Lack of comprehensibility of the concept	87,5%
Learning is teacher directed only	61,3%
Other: teacher only gave a task (lack of theoretical explanation)	80,6%

6. EFL students preferences of using online learning

The final question proposed to the students was their preferences toward the use of online learning after an outbreak or in a normal situation. Because, the respondents of this study are graduate students, that almost all of the students had a compulsory job besides studying in post-graduate, they agreed that online learning is more beneficial. Even though the students didn't comfort and enjoy using online learning, however, more than half of the respondents preferred to use online learning after the outbreak (51,6%). This will be our new paradigm for the next learning system.

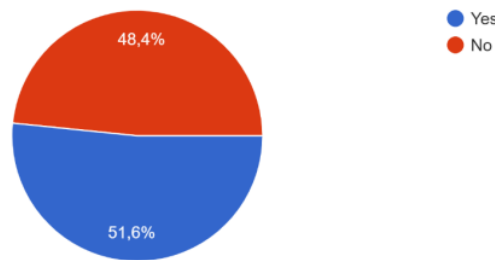


Figure 9: Use of online learning after outbreak

Almost all of respondents in this study experienced online learning and they have reluctant in their online learning. They don't enjoy online however they must do it due to the impact of Covid-19 spreading which obligate all of the education system to conduct study from home. Besides, Hasan, & Khan (2020) propose students enjoyment in their learning are a very pivotal role to create the learning to create a positive and meaningful learning. Hernik & Jaworska (2018) adds that enjoyment and happiness have a positive effect on learning, memory, and social behavior. If the students do not enjoy the learning process may impact low motivation to participate in learning with not enthusiasm for the journey and not optimism for the outcomes.

During online learning zoom app is the most frequently used to have virtual meeting. Guzacheva (2020) proposed that the innovative approach of Zoom technology enhances positive

learning outcomes for diverse groups of medical students as well as encouraging higher education in remote areas while potentially reducing workloads for English teachers. Google classroom and WhatsApp are also to be the highest rank used by the instructors in online learning during this coronavirus disease (Gon & Rawekar, 2017; Alim, Linda, Alimin, Md Saad, 2019).

Even though online learning can be a panacea for keeping educational process, it still remains a huge of problems. In this study, poor comprehensibility in online learning is the first problem encountered by the students. This is one of the reason students don't comfort in their online learning. This result is quite different from the study by Husaini (2020). He proposed that online learning can enhance the level of student confidence, comfort in attending lectures, and enough time to read the material provided can be longer so that they can understand the material provided. Likewise, the challenges in online learning are internet connection which is not evenly assessed in each student residence. The study by Ahmad (2020) proposes that internet connection is the most problem faced by under developing country. They usually do not have efficient internet access to struggle for their online. Eventually, they don't participate in classroom instructional process or even they prefer to leave the class.

In the midst of the limitations of online learning, it is still recommended to the educational institution by minimizing the deficiency and keep continuing the advantages. The problems with the infrastructure such as internet connection and the challenges in the form of learning process for example insufficient comprehensibility, passive communication between teacher and students, no guidance toward the tools and materials, and only giving a task should be reformed to maintain online learning which performs good quality of learning. The advantages of online learning such flexibility and independent learning need to be integrated when the teaching is permitted to have face to face meeting. Nambiar (2020) suggests to the teachers that online learning needs to be continued even though learning process has allowed to come directly in the classroom. She deliberates that online learning could cultivate independent and autonomous learning. Meanwhile, the problems that encountered during online learning for example the connectivity to internet and the preparation or guidance to use online platforms has to be prepared.

This study obtains that students prefer to continue online learning after outbreak even though they don't comfort. Amir et.al. (2020) proposed that online learning will be more beneficial in the time of distance learning caused by coronavirus disease. However, the administrators should pay attention to the factors that affected the students' responses negatively toward online learning. Abbasi, Malik & Memon (2020) suggested to administration and faculty members should take necessary measures for improving e-teaching for better learning during and after lock down. They have to notice the students' responses if they would like to implement online learning after an outbreak. Hybrid learning can be the alternative one to integrate online and offline learning. The survey was showed as students' responses on online learning during covid-19. All respondents are 30 graduate students in the State Islamic Institute of Tulungagung (IAIN Tulungagung) majoring English education department. 80% of the respondents are female and the rest are male.

CONCLUSION

Online learning is to be the panacea of learning in the time of Covid 19 outbreak. It is declared to be the best solution to survive the learning process as the result of work from home or even lockdown (Dhawan, 2020; Chick et.al., 2020). This online learning is very needed, consequently and unfortunately this is imposed in a hurry and unplanned. Certainly, the students who are directly affected call various responses toward the implementation of online learning.

Surprisingly, this study showed that students didn't enjoy online learning, however, the students still preferred to use online learning even though covid-19 has been stopped. Flexibility was the biggest reason why the students preferred to use online learning. They thought that with online learning they could study every time and everywhere. On the contrary, the highest problem with online learning is the poor comprehensibility of the content.

This study suggested instructors and institutions to create the method of content materials and content delivery moods in which makes the students comfortable and enjoy the learning process. Besides, they should pay attention also to the network connection. They should provide the materials that support both online and offline. Before conducting classroom instruction, it is better to questionnaire the students' wants for their online learning. Finally, when the study is permitted to

conduct face-to-face meetings, the teacher can modify their learning with online and offline, needless to say, hybrid teaching.

This study needs to be explored further especially in the scope of the online learning application. How the teachers and students adopt online mode with limited preparation, why the students prefer to use online learning after the outbreak, or the material that can be accessed via online and offline will be the crucial topics to be researched and developed. Moreover, the correlation between online learning and independent learning or how online learning can cultivate students' autonomy in their learning. Online learning is to be the panacea of learning in the time of the Covid-19 outbreak. It is declared to be the winning solution to survive the learning process as the result of work from home or even lockdown (Dhawan, 2020; Chick et al., 2020). This online learning is very needed, consequently and unfortunately this is imposed in a hurry and unplanned. Certainly, the students who are directly affected call various responses toward the implementation of online learning.

Surprisingly, this study showed that students didn't enjoy online learning, however, the students still preferred to use online learning even though covid-19 has been stopped. Flexibility was the biggest reason why the students preferred to use online learning. They thought that with online learning they could study every time and everywhere. On the contrary, the highest problem with online learning is the poor comprehensibility of the content.

This study suggested instructors and institutions to create the method of content materials and content delivery moods in which makes the students comfort and enjoy in the learning process. Besides, they should pay attention also to the network connection. They should provide the materials that support both online and offline. Before conducting classroom instruction, it is better to questionnaire the students' wants for their online learning. Finally, when the study is permitted to conduct the face-to-face meeting, the teacher can modify their learning with online and offline, needless to say, hybrid teaching.

This study needs to be explored further especially in the scope of the online learning application. How the teachers and students adopt online mode with limited preparation, why the students prefer to use online learning after an outbreak, or the material that can be accessed via online and offline will be the crucial topics to be researched and developed. Moreover, the correlation between online learning and independent learning or how online learning can cultivate students' autonomy in their learning.

REFERENCES

- Adnan, M., & Anwar, K. (2020). Online learning amid the covid-19 pandemic: students' perspectives. *Online Submission*, 2 (1), 45-51.
- Al Ghazali, F. (2020). Challenges and opportunities of fostering learner autonomy and self-access learning during the COVID-19 pandemic. *Studies in Self-Access Learning Journal*, 11(3), 114-127. <https://doi.org/10.37237/110302>
- Ali, Wahab. (2020). Online and remote learning in higher education institutes: a necessity in light of covid-19 pandemic. *Higher Education Studies*. 10. 16. 10.5539/hes.v10n3p16.
- Alim, Nur & Linda, Wa & Alimin, Fahmi & Md Saad, Mohd Shamsuri. (2019). The effectiveness of google classroom as an instructional media: a case of state islamic institute of kendari, indonesia. *Journal of Humanities and Social Sciences*, 7. 240-246. 10.18510/hssr.2019.7227.
- Aliyyah, R. R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A. R. S. (2020). The perceptions of primary school teachers of online learning during the covid-19 pandemic period: a case study in indonesia. *Journal of Ethnic and Cultural Studies*, 7(2), 90-109.
- Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research*, 5(4), 1-9.
- Benson, P. *Teaching researching autonomy in language learning*, 2nd ed.; Pearson: London, UK, 2011.
- Chick, R. C., Clifton, G. T., Peace, K. M., Propper, B. W., Hale, D. F., Alseidi, A. A., & Vreeland, T. J. (2020). Using technology to maintain the education of residents during the COVID-19 pandemic. *Journal of Surgical Education*.

- Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, 1-6.
- Nambiar, D. 2020. The impact of online learning during COVID-19: students' and teachers' perspective. *The International Journal of Indian Psychology*, Volume 8, Issue 2. DOI: 10.25215/0802.094
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22.
- Dhawan, S. 2020. Online Learning: A Panacea in the Time of COVID-19 Crisis, *Journal of Educational Technology Systems* 2020, Vol. 49(1) 5–22. DOI: 10.1177/0047239520934018
- Dickinson, L. Autonomy and motivation: A literature review. *System* 1995, 23, 165–174.
- Douglas, M., Katikireddi, S. V., Taulbut, M., McKee, M., & McCartney, G. (2020). Mitigating the wider health effects of covid-19 pandemic response. *Bmj*, 369.
- Gon, Sonia & Rawekar, Alka. (2017). Effectivity of e-learning through whatsapp as a teaching learning tool. *MVP Journal of Medical Sciences*. 4. 19. 10.18311/mvpjms/0/v0/i0/8454.
- Gonzalez, T., de la Rubia, M. A., Hincz, K. P., Comas-Lopez, M., Subirats, L., Fort, S., & Sacha, G. M. (2020). Influence of COVID-19 confinement on students' performance in higher education. *PloS one*, 15(10), e0239490.
- Guzacheva, N. (2020). Zoom technology as an effective tool for distance learning in teaching english to medical students. *Bulletin of Science and Practice*. 6. 457-460. 10.33619/2414-2948/54/61.
- Hasan, N., & Khan, N.H, 2020. Online teaching-learning during covid-19 pandemic: students' perspective. *The Online Journal of Distance Education and e-Learning*, Volume 8, Issue 4.
- Huang, R. H., Liu, D. J., Tlili, A., Yang, J. F., & Wang, H. H. (2020). Handbook on facilitating flexible learning during educational disruption: The Chinese experience in maintaining undisturbed learning in COVID-19 Outbreak. *Beijing: Smart Learning Institute of Beijing Normal University*.
- Huang, R.H., Liu, D.J., Tlili, A., Yang, J.F., Wang, H.H., et al. (2020). *Handbook on facilitating flexible learning during educational disruption: the chinese experience in maintaining undisturbed learning in covid-19 outbreak*. Beijing: Smart Learning Institute of Beijing Normal University.
- Iyer, P., Aziz, K., & Ojcius, D. M. (2020). Impact of covid-19 on dental education in the united states. *Journal of Dental Education*, 84(6), 718-722.
- Krishnapatria, K. (2020). From 'lockdown' to letdown: Students' perception of e-learning amid the covid-19 outbreak. *ELT in Focus*, 3(1), 1-8, doi: 10.35706/eltinf.v3i1.3694
- Kwesi E., Adu, E., Mawuko, D., Komla, Ansah, E.A., 2020, Online Learning in Higher Education During COVID-19 Pandemic: A Case of Ghana, *Journal of Educational Technology & Online Learning*, Volume 3, Issue 3, 2020, Doi: 10.31681/jetol.726441
- Lisa R. Amir, Ira Tanti, Diah Ayu Maharani, Yuniardini Septorini Wimardhani, Vera Julia, Benso Sulijaya & Ria Puspitawati. (2020). Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia, *BMC Medical Education*, volume 20, Article number: 392.
- Little, D. 1991. *Learner Autonomy 1: definitions, issues and problems; authentik language learning*. Resources Ltd.: Dublin, Ireland.
- Littlewood, W. "Autonomy": An anatomy and framework. *System* 1996, 24, 427–435.
- Littlewood, W. (1999). Defining and developing autonomy in east asian contexts. *Appl. Linguist*, 20, 71–94.
- Lukman, L., Hasnah, H., & Sasliani, S. (2020). A descriptive study of interest learns high class students on face to face and online learning in UPTD SDN 57 Parepare. In *International Conference on Science and Advanced Technology (ICSAT)*.
- Muhammad Adnan & Kainat Anwar, 2020, Online learning amid the COVID-19 pandemic: Students' perspectives, *Journal of Pedagogical Sociology and Psychology*, Volume 2, Issue 1, 2020 <http://www.doi.org/10.33902/JSPS.2020261309>
- Rose, S. (2020). Medical student education in the time of COVID-19. *Jama*.
- Sintema, E. J. (2020). Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(7), em1851.
- Yang, Y. & Cornelius, L. (2004). Students' perceptions towards the quality of online education: a qualitative approach. *Association for Educational Communications and Technology*, 27.

Erna1

ORIGINALITY REPORT

0%

SIMILARITY INDEX

0%

INTERNET SOURCES

0%

PUBLICATIONS

0%

STUDENT PAPERS

PRIMARY SOURCES

Exclude quotes On

Exclude matches < 20%

Exclude bibliography On