EDUCATIONAL CHALLENGES

A NEW CHALLENGE: THE RECONSTRUCTION OF ONLINE LANGUAGE LABORATORY ON DISTANCE LEARNING IN INDONESIA

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ABSTRACT

The COVID-19 wide spread constrained numerous schools and colleges to stay closed briefly. This phenomenon brings challenges to the teaching-learning process.

***The aim** of this paper is to explain the learning process using a new language laboratory format. There can be several formats of the online learning process: Knowledge base, online support, asynchronous training, synchronous training, and hybrid training. This study employed a descriptive design with a qualitative approach to examine the language laboratory strategies and challenges through the pandemic in the University.*

***Methods.** A questionnaire and interview were used in this study to elicit the responses of the English Lecturer in Language Center, Sebelas Maret University, Indonesia.*

*The **findings** reveal that the coronavirus disease 2019 (COVID-19) pandemic has reformed the Language Laboratory significantly. On the one hand, both lecturers and students face multiple challenges in conducting the teaching and learning process. On other hand, the new format and content of the Online language laboratory help teachers and students in the teaching-learning process. COVID-19 also opens an opportunity to reconstruct the teaching-learning system in the laboratory and establish updated programs and assessments.*

*The **conclusion**. The online language laboratory employed for the development of the virtual laboratory environment: Zoom Meeting and Microsoft Teams software was used to create the simulations that support the audio-video media. Microsoft Teams platform was used to host and control the virtual simulations, with additional appropriate resources created for offering learners a collaborative learning environment. The usefulness of the online language laboratory was commended by lecturers and learners. Learners appreciated the online language laboratory experience because it improved their motivation to learn English. Moreover, the response collected from the learners and lecturers indicated that the developed Online Language Laboratory supported the learners' understanding of English Language Skill.*

KEYWORDS: *Challenges, Language Laboratory, Pandemic.*

INTRODUCTION

The COVID-19 widespread constrained numerous schools and colleges to stay closed briefly. Several ranges are influenced around the world, and there is a fear of losing this entire continuous semester or even more within the coming future. Various schools, colleges, and colleges have suspended in-person education (Dhawan, 2020). Beginning reactions from the instructive institutions involved staff hurrying to alter their conventional educational modules to fit a web environment, care to innovation, learning administration frameworks, and various online learning stages that learners seem to access from home (Bhagat & Kim, 2020). It is clear that whereas transition to online conveyance is a necessity, neglecting online pedagogy can be similarly hindering.

Indeed, the whole world was in a problem because of COVID-19 threats, the reality of the situation was challenging to bear, and the education sector remains one of the worst-hit by the Coronavirus outbreak (Onyema et al., 2020). Changes in face-to-face instructing around the world reestablished what has been a long-time discussion: can conventional in-person learning process, hands-on research facility encounters be enough supplanted with computer reenactments, inaccessible information securing, and other sorts of virtual or mimicked laboratory exercises? It is difficult to answer whether virtual laboratory classes are as efficient as in-person classes because of a myriad of confounding variables, ranging from what the educational objectives are for the laboratory to the many different modalities of virtual laboratory activities (Stokes & Silverthorn, 2021). With no conceivable outcomes of performing face-to-face activities, it is vital to think of elective ways to keep understudies persuaded to memorize and lock in the fundamental course content (Sette-de-Souza, 2021).

Prior to this change, English classes would meet on the Laboratory campus consisting of various sections to present language skills (i.e., asking for opinions, giving sources of information, etc.). The Lesson in the Laboratory provides for the practice of those skills and an extended period during which students demonstrate their ability to produce the aforementioned skills (Tyner, 2021). In a situation where the students are not allowed to go to school, the alternative is to move from traditional to online education (Basilaia & Kvavadze, 2020). It

would not have been conceivable without the advanced technology we have within the 21st century. The integration of the Internet into the learning process makes it conceivable to conduct online lessons, courses, webinars, indeed challenges such as the work of Language Laboratory at such a specific time.

To respond to this phenomenon the researcher outlines three sections: firstly, the researcher starts by giving an overview of the COVID-19 pandemic affects the education sector, especially the English learning process; secondly, we explicate the plan conducted by some English lecturers in the Language Laboratory issue; and thirdly, the researcher concludes the paper by discussing the implications and way forward.

The aim of this paper is to explain the learning process using a new language laboratory format. There can be several formats of the online learning process: Knowledge base, online support, asynchronous training, synchronous training, and hybrid training.

LITERATURE REVIEW

• Online Learning in Pandemic COVID-19

The major effect of pandemic COVID-19 in online learning is the learning media. Some facilities move to e-learning quickly with the Internet's growth including equipment and tools. Online learning is derived from traditional education, where teachers can meet learners face-to-face (Mahyoob, 2021). The online learning format tried to engage and attract learners' attention in some ways to a physical classroom. In this case, the essential parts are the internet coverage, availability of computers or smartphones in the population (Basilaia & Kvavadze, 2020). The Online laboratory has been considered as interactive media where

simulation experiments can be conducted (Firmayanto et al., 2021). With this simulation, it can be easier for students and educators to conduct experiments without having to be in a laboratory. In addition, the Online Laboratory can help improve the understanding of scientific concepts, such as chemistry which contains much abstract content in microscopic or particle areas.

This situation pushes university members to look for the best format for the teaching-learning process. The changes of the system and competences conducted by the lecturers, students, and the university will be used in the pandemic period. Online learning can be termed as a medium that can make the teaching-learning process more student-centered, more innovative, and even more flexible (Dhawan, 2020). The lecturers have realized distance learning in a new way, adapted the assignments to the new format of the lessons, which will be reflected positively on students' qualifications.

In pandemic COVID-19, the online teaching method is one of the strategies for creating and solving learning problems. Since lecturers conduct a key role in the teaching-learning process, they need to have sufficient knowledge about a variety of teaching methods (Haftador et al., 2021). Those methods are used to teach appropriately on the basis of learners' capabilities, moreover to overcome the unpredictable situation such as Pandemic COVID-19. Considering the closure of educational institutions during the COVID-19 online education is expanding vastly (Mukhtar et al., 2020).

There can be several formats of the online learning process: knowledge base, online support, asynchronous training, synchronous training, and hybrid training.

Firstly, knowledgebase format is a set of material published on the website and provides general learning instructions that a student has to work without support available. Secondly, the online support type is a modified version of the knowledge base. There are some discussion menus, web forums, or other communication ways. This mode is available to get support on some topics with other participants.

Thirdly, the asynchronous format means that the learning process is not conducted in real-time, but the students are provided with material and content regularly. Lecturers are assigned and provide support through email or other communication platforms. Fourthly, the synchronous process is done in real-time with a live lecturer and other participants. Participants can communicate directly with the lecturer and other group members. And fifthly, hybrid learning is a combination of online and in-person interaction.

To face the pandemic COVID-19, educational members implemented the strategies to ensure the continuation of the learning system, involving various components such as the virtual platforms, digital content, and student learning media support. These plans must respond to various levels such as infrastructure, media, laboratory, and research and development to ensure the continuity of teaching and access to platforms of technological resources (Margarida et al., 2021). Globally, the sluggish pace of progress in academic institutions is lamentable, with centuries-old, lecture-based teaching approaches, cultural prejudices embedded and outmoded classrooms (Rizvi & Nabi, 2021).

• **Language Laboratory**

Technology literacy as online learning means is not enough just to have a computer and software; it needs expertise in using various learning platforms and applications (Firmayanto et al., 2021). The learning process needs a language laboratory to improve the students' language competence. The field findings show that students' skills are still low, even though these skills are important skills that students must possess and have become one of the focuses in language skills. Therefore, Language Laboratory is expected to be able to improve the quality of language competence through online media.

Language Lab is an instructional technology tool consisting of a source unit such as audios, audio-visuals, videos, PCs, LCD projector, Internet, and/or written materials to students at individual seats, with a wide variety of potential feedback mechanisms (Khaleel, 2020). The Teacher Computer is the core part of the Language Lab. All features and controls are available in Teacher Console to manage the material and students' performance.

Nowadays, the language laboratory has varied functions besides room for listening practice. The language laboratory is a supporting device for the implementation of education in study programs in academic and/or professional education. Some important features of this tool are easy to navigate interface and menus with minimal or no informatics skills, a clean and research targeted text editor with standard information on experiment details like name, objectives, material and methods, results and conclusion, a dedicated space to handle storage of files such as pictures, WORD documents, EXCEL sheets, PDFs, hyperlinks, annotations/comments space,

and writing protocols to PDF files (Shrikant & Harshul, 2018). This laboratory functions as a supporting facility to carry out education, research and teaching in one or a number of branches of science and technology in accordance with the field of study concerned, particularly regarding language (Buska et al., 2020). The room also functions as a reading room and inventory storage related to language learning such as dictionaries, listening devices, and other language learning-related tools.

Since the appearance of language laboratories, technology has always been regarded as a new panacea for language teaching and learning. Today's language labs are available in many different types of technology. Multimedia language labs use computers and incorporate language lab software. Digital language labs typically use digital hardware for the students and software at the teacher station only. Language labs can also be Mobile language labs or wireless language labs. The most common language labs terminologies are: language laboratory; multimedia language lab; language lab; language lab & media center; multimedia language learning center; software language; digital language lab; portable language lab. The study shows that in an average language class in a classroom all students combined speak only a limited time of the class time. With a language lab, all students in the class can work on different levels in 6 different groups or self-access, and speak simultaneously without distracting each other regardless of the class size.

This work can be played back to the students to practice and improve and the teachers can save this work and assign this as homework for the students. A languages laboratory fundamentally represents the dialogical opening of a predominantly monolingual culture to a world of knowledge, of human intellectual production on an international scale, using the English language as empowering factor for these exchanges (Rotili et al., 2019). Without a language lab, this is not possible and in a class of more than 10 students, each student gets less than one minute of speaking practice without being able to record or save the student's work.

METHODOLOGY

This research was conducted in the Language Center Unit, Sebelas Maret University. The method used for data collection is the descriptive and analytical approach. This study was qualitative with questionnaire techniques. The use of these methodologies aims to get a deep explanation of the teachers who participated in the study. The population investigated in this study is English Lecturers in the Language Center Unit. To select a representative sample out of this population the researcher invited three English teachers. The study was conducted for one week to answer questions in the form of close questionnaires. All participants have implemented teaching online and conducted the Laboratory learning process. The teachers used online teaching from January to March 2021.

A deep interview was administered to 5 teachers (T1, T2, T3, T4, and T5) by phone. The questionnaire consists of 20 questions: Pandemic Impact, Online Learning Process, Laboratory Process, Students' attitude toward online learning. The questionnaire was adapted from Anderson (2008) and Ramírez et al. (2015). The questions were designed by using a Likert Scale of five items: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), and Strongly Agree (SA). The

data were collected about five months after online learning was implemented. The second method in collecting data to investigate the problem is interviewing. In this study, semi-structured interviews were used to support the data gained from the questionnaire.

The data were analyzed through several steps: scoring the questionnaire, finding the percentage, calculating the central tendency (CT), interpreting data analysis, and stating the conclusion. Meanwhile, the data from the interview recorded were transcribed. Then, the important data from the interviews were used to support the data from questionnaire results.

FINDING AND DISCUSSION

- **Response to Coronavirus Disease 2019 by English Class**

Lecturers' experiences and explanations were investigated in terms of Pandemic Crisis Impact on English Online Learning Process.

(T1) First, of course, what material will be used, after that what platform will be used. Every time I want to teach, I refer to RPS, for example, currently the material is listening, I use Telegram or Youtube. So, I posted Audio. What tool? Most cellphones for recording. Zoom to record. My lab turned into that platform.

(T2) So I have to determine what steps I will do in class. I'll open the material later. Then I made the media and material. I have adapted from various sources. More material to grammar. I recorded first I made Youtube. I'll see you later on Zoom. But they have to see Zoom first.

(T3) The teacher prepares a Zoom meeting for learning media with students. For planning, it is almost the same as offline learning. Now students receive ebooks or PDFs. We contact

students to create class groups on Telegram because there are a lot of mixed-ups in the WA group. So, it can be focused and managed properly. At the initial meeting, we said that we used Zoom meetings. In the beginning, we discussed the learning contract and its media.

(T4) The first thing to prepare is a Google class, class group, or Telegram to collect class participants. Give initial information before the initial media is used. Have all of them entered or not. Are there any schedule adjustments? What initial platform are we using? First, we use WA then Zoom.

Others customize the material, PDF, Youtube, share screen. Online media use has a different effect from face-to-face learning in general.

(T5) Online demands, learning videos. Every new week. Have a Youtube channel. To facilitate the time 100 minutes feels fast. Before entering class as an assignment for students to see. Students have gotten a glimpse of the information, which is shared on Telegram when in class they answer questions using a Google Form to be downloaded and then reviewed the student's answers. In addition to a Google Form, pretest before the material. Learning using ebook books. Using printed materials. The media uses a Google Form for the attendance list. Google classroom for discussion then goes to Zoom. Lecture contract rules are notified in advance. There is a class agreement signed by one of the students via Google Form. 1 class of 30 students, they choose their own schedule.

Based on the interview above, the researcher gets some data then those will be explained as follow:

a. Preparedness

The most difficult challenge in preparedness on the parts of the online learning process is to handle a crisis similar to the one brought about by this pandemic. Poorly managed and resourced institutions coupled with socially disadvantaged students with limited access to the Internet and technology have affected how educational institutions adequately respond to learners' needs and their inability to engage in an online learning environment. Several reports indicate that infrastructural requirements to support online learning are quite valuable, especially for individuals who choose to study remotely from their homes.

The researcher identified two strategies under teacher and university preparedness. They are as follows:

(1) Selecting Digital Technologies especially on theoretical and practical activity.

Teachers work intensively to adapt their planned learning activities to fit distance education. Therefore, we asked the teachers what applications they use in distance education. The result was 10 different applications. Five applications dominated such as applications that enabled real-time video-conferencing: Zoom, Google Meet & Hangout, YouTube, and Microsoft Teams.

(2) Mapping student access to digital technologies.

Implementation of online education pushes students to have access to computers and the Internet connection. Although most of the students do it well, some have to face the difficulties of it. One device should share with others in the family; other students may have a limited Internet data plan or poor internet connection. These factors are prerequisites for the daily use of video conferencing tools.

b. Learning Process

Based on the results of the interview, it was found there was some collaboration from various parties including teachers, schools, and related education offices. The planning step in the online learning process is conducted by holding discussions with teachers at school about the learning process that is appropriate for the students. It should be noted that the majority of UNS students live in various areas around Indonesia, therefore geographically it is not all areas can be well reached by signals. In addition, there are limitations for students in accessing the Internet. Based on this background, several online learning strategies that can be implemented are produced, namely:

1) Media in use

The learning process using the WA Media (WhatsApp). WhatsApp is a communication medium that is already popular and widely used by the community. With limited time and easier use, WhatsApp has become an intermediary medium between teachers and students to provide learning materials for both modules and also practice questions.

Another supporting media chosen in the online learning process is to use Google Classroom. Through Google Classroom media the teacher can send materials, assignments, and exercises to students. Google Classroom is an educational media platform designed for online learning. In addition, Google Classroom has several features that support online learning.

2) Organizing the class

The process of organizing is a predetermined plan. The organizing process includes determining lesson hours for each subject, distributing material, and assigning teachers to students. In facilitating coordination between teachers and students, groups

between subjects are created to make it easier for students and the teacher to communicate. At this stage, the school arranges the details of the online learning schedule to be carried out. This process is expected to ensure that online learning does not give a burden to students and parents to carry out the learning process. Carried out assignments are also given in accordance with the learning portion of students at home by paying attention to health principles.

- **Language Laboratory Format in Pandemic COVID-19 Online Learning**

Format of Online Language Laboratory.

The format of language laboratory based on Online Learning tries to combine the advantages of the Internet with computer devices. Additionally, the online laboratory can develop student language skills such as listening, speaking, reading, and writing. The format in the online language laboratory is different from conventional language laboratory. Based on the interview, a teacher can provide easily all the equipment and media.

(T1) It's good but it depends on the signal. Actually, it's fine but it depends on the signal for the audio/ video. If I use a headset so that outside sounds don't come in and the sound is clear. Minimal destruction. Then for the lighting, I use the background feature. There are none for students. They are free to use a laptop or cellphone. I did not specify.

(T2) The tools used, starting from the beginning of the video using PPT or Canva. Video editing with cellphones and laptops with applications. Video capture with a cellphone camera, audio also with a cellphone or with a laptop, headsets.

For students, they are free but I emphasize using a laptop. But some have problems with laptops, so they use HP.

(T3) Laptops are easier to operate. Others are software, audio-video on a laptop or software.

(T4) Hardware, laptop, headset, cellphone, Zoom, Google Form, quizzes, Google meet.

(P5) So far, it's been smooth. Sometimes the mic is broken. Can chat in the chat-box.

In the online language laboratory, the lab devices are controlled and programmed through software in computer. A user webcam allows monitoring of the learning activity. The online laboratory can be used from many locations, it can be utilized by a much larger audience and in a longer time duration than a conventional lab. The format of the online laboratory consists of:

a. Laboratory devise, physical instrument or Computer Assisted Language Learning software
b. Equipment for control the remote users
c. Teleconferencing equipment for chatting capabilities and collaboration among students and instructor
d. Control software for users to perform experiments
e. Lab scheduling component assigning users time to use the lab
f. Work assignments software for students.
g. Instructions manual on how to run the online laboratory.

Furthermore, student time and places access will be administered there. Work assignment paper and course material for the learning are available over the Internet from the same site. The theoretical concept behind the Online Language Laboratory is laboratory accessible to students and lecturers. The Online Language Laboratory is integrated

with the Internet accessible to enrich the students' educational experience.

There are some features of the language lab, which make the language class have more interactive session:

a) Attention: Attention on the subject is increased resulting in better retention of the concepts.

b) Acoustics: It provides equal opportunity to all the students to hear the instructor irrespective of the place where they are seated.

c) Building Student Experience: Students can build on their existing experiences and gain further knowledge of computers while learning in the computer language lab.

d) Excitement: Students become excited when using learning lab systems. The student's attention is heightened and the boredom of repetitive learning is lifted.

e) Efficiency: The teacher can monitor individual students (and talk to them) much more efficiently than in a regular classroom.

f) Individualization: Labs provide the capability for dividing the class into several groups.

g) Internet access: The new generation of multimedia systems allows the students to be connected to the World Wide Web and to be able to access information on a global basis.

h) Privacy: It also provides privacy that encourages shy students to speak without any hesitation.

i) Teacher monitoring: Since the teacher is not concentrating on producing the next question or drill, he/she can concentrate more on the student responses.

j) Variety: The language lab provides variety from regular classroom situations. The teacher's role is

changed, and the students are more active for longer periods.

• **The Challenge of Online Language Laboratory**

Actuating process or implementation there are several obstacles such as not all students can understand the instructions and instructions of the teacher in providing material in the form of modules or questions. Another obstacle is that a large number of assignments that students submit to the teacher makes the recap and assessment process more complicated and increases the teacher's time to check so that data recap errors may occur. Handling that is carried out related to this problem is by scheduling students in each class to collect assignments and carry out offline discussions in class with limited time and the number of students.

Controlling includes monitoring the online learning process and the obstacles that arise in the process. The obstacle in the online learning process at the SWCU LAB Middle School was the ineffective learning using video conferencing using the WA application, Google Meet, and also Zoom. This occurs from not all regions having good internet network access so that not all students can follow the process so that the learning process is replaced by providing modules that are easy for students to understand and also the teacher distributes learning videos that support the student's learning process.

Before online learning, all of the homework, assignment, laboratory assessments, and examination in the course were paper-based. Nowadays on the pandemic, the lecturers and lab assistants convert the course to a fully online environment.

a. Lecturer Preparation

Lecturers have difficulty with the software they are going to use in their online labs. Lecturers must have the knowledge and understanding of course materials, the awareness of and skills for using virtual environment teaching methodologies, and the necessary technical competence for using the hardware needed in the Online lab.

b. Technological Changes

Update software required hardware changes that should be operated by all members. The changes made it very difficult for lecturers to keep up and required them to constantly look for resources to master the changes. Lecturers run through an implementation difficulty in the first stage of transition, regardless of whether there is support or not.

c. Curriculum Changes

Lecturers should have the ability to handle the technical, organizational, and social challenges which came with the online environment. Curricular change is mainly caused by a teacher's perception of the new course materials and media, the goals with which it comes, and the underlying philosophies behind the course or the new medium of teaching.

d. Student Competency

The students did not have the competencies in the use of computers and technology. The lack of these skills caused problems for both the lecturers and the students because valuable time was used toward teaching computer skills and technology at the expense of teaching the course content.

e. Communication

A lack of communication between the lecturers and the schools' technology experts often created a challenge. They indicated that sometimes the expert was difficult to contact when immediate assistance was needed to solve a problem.

Challenges remain for those wanting to offer laboratory activities to distance students: their familiarity with general applications; their ability to install software correctly, given that they do not come onto campus; and their ability to troubleshoot independently. Giving students the ability to interact with software and equipment they would not have encountered previously outweighs these problems.

CONCLUSIONS

Language Laboratory is a requirement for education because it offers learners the possibility to have practical experience. This paper presented an exploration of a new online language laboratory model based on lecturers' perspectives for pandemic Covid-19 times. An online language laboratory that can be operated and remoted through the computer, internet, and interactive software supports the teaching of the English learning process. The online language laboratory employed for the development of the virtual laboratory environment: Zoom Meeting and Microsoft Teams software was used to create the simulations that support the audio-video media. Microsoft Teams platform was used to host and control the virtual simulations, with additional appropriate resources created for offering learners a collaborative learning environment.

This paper also presented some online learning challenges that create some learning strategies by the lecturers. In summary, the usefulness of the online language laboratory was commended by lecturers and learners. Learners appreciated the online language laboratory experience because it improved their motivation to learn

English. Moreover, the response collected from the learners and lecturers indicated that the developed Online Language Laboratory supported the learners' understanding of English Language Skill.

Obviously, that is not all the practices of a real laboratory, can be conducted in the online laboratory, but the usefulness of Online Language Laboratories for English learning has been proven by several studies. Finally, this new laboratory format presented in this paper is a generic framework that can be applied to other courses that need to provide a virtual laboratory. One more perspective of this study is the fact that we are observing the development of an online laboratory for English Learning activities by utilizing the same methodologies and tools.

REFERENCES

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), em0060. https://doi.org/10.29333/pr/7937

Bhagat, S., & Kim, D. J. (2020). Higher Education Amidst COVID-19: Challenges and Silver Lining. ABSTRACT. *Information Systems Management*, *37*(4), 366–371. https://doi.org/10.1080/10580530.2020.1824040

Buska, W., Latif, M., Risnita, R., Us, K. A., & Prihartini, Y. (2020). The Management of Language Laboratory in Improving Students Arabic Competence. *Arabi : Journal of Arabic Studies*, *5*(1), 51. https://doi.org/10.24865/ajas.v5i1.249

Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems, 49*(1), 5–22. https://doi.org/10.1177/0047239520934018

Firmayanto, R., Heliawati, L., & Rubini, B. (2021). The Effectiveness of Content and Language Integrated Learning (CLIL) Online Assisted by Virtual Laboratory on Students' Science Process Skills in Acid-Base Materials. *Journal of Physics: Conference Series*, *1918*(5). http://dx.doi.org/10.1088/1742-6596/1918/5/052061

Haftador, A.M., Shirazi, F. & Mohebbi, Z. (2021) Online class or flipped-jigsaw learning? Which one promotes academic motivation during the COVID-19 pandemic?. *BMC Medical Education, 21* Article 499. https://doi.org/10.1186/s12909-021-02929-9

Khaleel, M. S. (2020). *Language Laboratories* (Publication No. n.d.) [A Research paper submitted to the Department of English College of Education in Karbala University as partial fulfillment for the requirements of the degree of B. A. in English language, University of Karbala]. https://doi.org/10.13140/RG.2.2.21635.12321

Mahyoob, M. (2021). Online learning effectiveness during the COVID-19 pandemic: A case study of Saudi universities. *International Journal of Information and Communication Technology Education*, *17*(4), 1-14. https://doi.org/10.4018/IJICTE.20211001.oa7

Margarida, R., Rui, S. R., & Franco, M. (2021). Teaching and researching in the context of COVID-19: An empirical study in higher education. *Sustainability (Switzerland)*, *13*(16), 1-18. https://doi.org/10.3390/su13168718

Mukhtar, K., Javed, K., Arooj, M., & Sethi, A. (2020). Advantages, Limitations and Recommendations for online learning during COVID-19 pandemic era: Online learning during COVID-19 pandemic era. *Pakistan Journal of Medical Sciences, 36*(COVID19-S4). https://doi.org/10.12669/pjms.36.COVID19-S4.2785

Onyema, E.M., Eucheria, N.C., Obafemi, F., Sen, S., Atonye, F.G., Sharma, A., & Alsayed, A.O. (2020). Impact of Coronavirus Pandemic on Education. *Journal of Education and Practice*, *11*(13), 108-121. https://doi.org/10.7176/jep/11-13-12

Rizvi, Y. S., & Nabi, A. (2021). Transformation of learning from real to virtual: an exploratory-descriptive analysis of issues and challenges. *Journal of Research in Innovative Teaching & Learning*, *14*(1), 5–17. https://doi.org/10.1108/jrit-10-2020-0052

Rotili, L. B., Bussler, N. R. C., Amaral-Oliveira, A., & Baggio, D. K. (2019). Process of internationalization and regional development: consolidation of a language teaching laboratory. *Revista Gestão Universitária Na América Latina – GUAL, 12*(3), 5–67. https://doi.org/10.5007/1983-4535.2019v12n3p45

Sette-de-Souza, P. H. (2021). Motivating learners in the pandemic period through WhatsApp and Google Meet. *Journal of Dental Education*, *85*(S1), 1156–1157. https://doi.org/10.1002/jdd.12352

Shrikant, P., & Harshul, B. (2018). Online electronic laboratory notebook: A secured cloud storage system scripted in Hypertext Pre-processor (PHP) programming language. *Journal of Engineering and Technology Research*, *10*(1), 1–6. https://doi.org/10.5897/jetr2018.0638

Stokes, J. A., & Silverthorn, D. U. (2021). Updating anatomy and physiology lab delivery: shifting from a paper-based to an online lab instruction platform, just in time for a global pandemic. *Advances in Physiology Education*, *45*(2), 290–298. https://doi.org/10.1152/advan.00190.2020

Tyner, A. (2021). Finding Time: Reflections on English Discussion Lesson and Activity Timing in the Shift to Online Lessons During the COVID-19 Pandemic. *Journal of Multilingual Pedagogy and Practice, 1,* 16–22.

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

НОВИЙ ВИКЛИК: РЕКОНСТРУКЦІЯ МОВНОЇ ОНЛАЙН-ЛАБОРАТОРІЇ ДИСТАНЦІЙНОГО НАВЧАННЯ В ІНДОНЕЗІЇ

Широке поширення COVID-19 змусило більшість шкіл та коледжів залишитися закритими на певний час. Це явище створило проблеми в процесі викладання та навчання.

Метою *цієї роботи є аналіз процесу навчання за допомогою нового формату лінгафонної лабораторії. Існують декілька форматів процесу онлайн-навчання: база знань, онлайн-підтримка, асинхронне навчання, синхронне навчання та гібридне навчання. У цьому дослідженні використовувався описовий дизайн із якісним підходом до вивчення стратегій лінгафонної лабораторії та викликів пандемії в університеті.*

Методи. *У цьому дослідженні були використані анкета та інтерв'ю, щоб отримати відповіді викладачів англійської мови в мовному центрі Університету Себеласа Марета, Індонезія.*

Результати *показують, що пандемія коронавірусної хвороби 2019 (COVID-19) значно сприяла реформуванні мовної лабораторії. З одного боку, і викладачі, і студенти стикаються з багатьма проблемами в процесі викладання та навчання. З іншого боку, новий формат і зміст лінгафонної лабораторії онлайн допомагають викладачам і студентам у процесі навчання. COVID-19 також відкрив можливість реконструювати систему викладання-навчання в лабораторії та створювати оновлені програми та системи оцінювання.*

Висновок*. Для розробки середовища віртуальної лабораторії використовувалася онлайн лінгафонна лабораторія: програмне забезпечення Zoom Meeting та Microsoft Teams було використано для створення симуляцій, які підтримують аудіо-відео медіа. Платформа Microsoft Teams була використана для розміщення та керування віртуальним моделюванням, а також були створені додаткові відповідні ресурси, щоб пропонувати студентам середовище для спільного навчання. Викладачі та студенти високо оцінили корисність лінгафонної лабораторії. Студенти оцінили досвід онлайн-мовної лабораторії, оскільки він покращив їхню мотивацію до вивчення англійської мови. Більше того, відповіді, зібрані від студентів та викладачів, вказують на те, що розроблена мовна онлайн-лабораторія підтримує розуміння студентами основних навичок володіння англійською мовою.*

КЛЮЧОВІ СЛОВА: *виклики, лінгафонна лабораторія, пандемія.*