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Improving Professional Competence of Economic Educators in Creating Learning Videos Through Online Training Scenarios

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This article aims to determine the effectiveness of online training scenarios in improving the professional competence of teachers indeveloping learning videos. The articlealso analyzes the applied online training scenarios to find out the performance of the training that has been carried out. The approach used in this research is a mixed-method (Mixed Methods Research) as a form of combination between quantitative research methods and qualitative research methods. Qualitative research uses an effectiveness test through a pair sample t-test, while the qualitative method is SWOT analysis to describe the process of running online training scenarios. The sampling technique used is Cluster Random Sampling and data collection by observation, interviews, documentation, and questionnaires. From the paired samples test results, it is known that the value of sig (2-tailed) is 0.000 < 0.05. So it can be concluded that there is an average difference between the teacher's ability to develop learning videos before and after participating in online training. The SWOT analysis carried out is also known for the strength of online training scenarios having easy access, the efficiency of use, material wealth, and creating a sense of security during a pandemic. In terms of opportunities, teachers can improve technological literacy, and there are opportunities to develop new training scenarios that online training scenarios can integrate into the education system. Weaknesses to watch out for include participants' unrepresented emotions, boredom arising, and the need for standardization of the required facilities. The challenges that online training scenarios must prepare for the best solution are the disruption of the internet network, the need for appropriate devices, and the need for an understanding of digital citizenship ethics.

Keywords: Learning videos, online training, teacher, professional competence

INTRODUCTION

The pandemic condition certainly has a global impact on the economy or government, and education. The learning environment initially carried out directly must be limited by various conditions (online learning/ blended learning). In this case, students' difficulties are always in the spotlight in research from prospective academics. However, the difficulties experienced by educators also need to be understood by various parties. Educators in Indonesia now consist of various generations, which makes the ability to adapt to the world of technology also different. During the COVID-19 pandemic, teachers need to utilize multimedia to extract knowledge from online learning resources such as images, animations, simulations, videos, and hypermedia (Barhoumi et al., 2022). The need for adopting new habits for teachers in the learning process during the pandemic makes all educators obliged to master technology in learning, especially in technology-based learning media.

The results of observations made on Economics educators in Central Java Province (Indonesia) as participants in Teacher Professional Education show that teachers have obstacles in applying learning media when the online learning system is. This condition follows the results of research conducted by (Kundu et al., 2020), which explains that it is necessary to understand the importance of the integration of ICT in school pedagogy and the recommendation that increasing teacher efficacy in accelerating the strengthening of ICT infrastructure will be able to maximize the learning process in schools. Through the attention and ideas of education stakeholders, various training needs to be carried out so that during the current pandemic, technology-based learning carried out by educators can be carried out optimally.

One of the media that is often used is video learning. Various learning systems such as online learning, blended learning, or hybrid learning often collaborate with learning videos in the learning process carried out. The characteristic of flexible learning videos makes eLearning can integrate this learning media into all learning concepts. Mixed learning models (multicomponent) through online learning and the integration of interactive learning videos can increase student engagement and self-motivation in learning (Lo et al., 2020). The previous discussion explained that teacher competence in understanding technology learning media was still lacking, including in making learning videos. This is the main problem in the research conducted.

According to (Tacconi et al., 2021), there are many common challenges and problems in teacher competency development ranging from the marginalization of teachers' jobs and working conditions to unsatisfactory wages and limited career opportunities. Based on this theory, the teacher's internal motivation becomes very important for the teacher to want to become a developing person. On the other hand, the future challenges of education become a burden if it is associated with the learning needs in today's modern era. Various efforts are needed from each element to support educational progress, especially in increasing teacher competence in preparing technology-based learning.

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The research focuses on looking at the effectiveness and scenario analysis of training and mentoring in making learning videos through online activities for economic educators in Central Java Province, Indonesia.

Teacher Professional Competence

Items from the Teacher Competence Inventory (TCI) relate to four dimensions: stimulating students to excel, using different teaching approaches to improve student learning, preparing students to become globally competent, and creating a supportive learning environment (Ludwikowska, 2019). Teachers, as the spearhead of change, become one of the representative solutions for the nation's progress. As for how to improve teacher professional competence, according to (Dudung, 2018), (1) strengthen and intensify the role of the Teacher Training and Development Center according to the field of science; (2) organize workshops or intensive training activities to finalize the mastery of teachers' teaching materials.

Tutorial video

Learning videos are one of the learning media that teachers can use to assist teachers in delivering learning materials in audio-visual form. The application of learning videos can be adapted to the needs of the classroom. Is it a main part of learning, just an introductory piece of learning, or an ice breaker for learning? Media in the form of learning videos implements a strong teacher pedagogical competence to help students, and teachers, adapt to the complexity of classroom situations and become a suitable way to prepare students for learning. In addition, through video learning media, the material is easily accepted by students and is considered useful (Minaríková et al., 2015).

The effectiveness of video-based learning in courses can be assessed through levels of access, feedback, performance, and student satisfaction (Grant & Oerlemans, 2021). This shows that learning videos have great potential to improve the quality of learning in the classroom. In the case of online learning during the current pandemic, learning videos as learning media has become a basic need for educators.

This is also the reason for the urgency of skills in developing videos for educators or prospective educators. Video in learning is a productive tool in teacher education in general, as well as for developing the professional vision of pre-service teachers in particular (Minaríková et al., 2015).

Online Training Scenario

The current pandemic conditions encourage every academician to be able to have creativity in carrying out existing educational activities. Changes in the education system and technological adaptation are the main things to overcome education challenges in future emergencies (Shohel et al., 2021). This is no exception to the training activities that teachers participate in during the current pandemic. Online training scenarios are an option that learning can implement to maintain teacher competence even during pandemic conditions.

Online training can improve administration and communication, empower learning anywhere and anytime, and support educational equity (Aldholay et al., 2020). The advantages offered in this online training scenario strengthen the application of online training scenarios in every existing academic activity. However, there are four challenges faced in online training. The four challenges that must be considered are the lack of basic facilities, external disturbances, the environment and the difficulty of conducting an assessment (Joshi et al., 2020). This challenge is a form of consideration that must be considered when implementing the online training scenario that will be carried out.

METHOD

This research uses a mixed-methods research approach, which combines quantitative research methods and qualitative research methods. Quantitative methods are used to test the effectiveness of online training and mentoring activities. At the same time, the qualitative method uses descriptive qualitative research assisted by SWOT analysis to describe or describe an unknown phenomenon in the mentoring process carried out. The data used is the primary data source obtained from the participants of the teacher professional competency development training through mentoring activities for making learning videos in the Central Java region, Indonesia. This research involves 39 teachers as participant. The participants are high school's teachers in Central Java. There is also a sampling technique used, Cluster Random Sampling, which determines the sample based on groups in a particular area as part of the research population. The technique used by researchers in obtaining data is by conducting observations, interviews, documentation, and questionnaires. Analysis of quantitative method data using the Paired T-Test technique is a parametric test used on two paired data. This analysis technique aims to see if there is a difference in the mean between two paired or related samples. The Miles & Huberman model uses the qualitative method consists of four flow activities that co-occur: data collection, data reduction, data presentation, and conclusion drawing/verification.

RESULTS

Statistic Analysis

Table 1. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretes	18.8718	39	2.70652	.43339
	Postes	22.6410	39	2.69001	.43075

This output shows a summary of the descriptive statistical results of the two samples studied, namely the Pretest and Post-Test scores. For the Pre Test value obtained, an average or Meant of 18.8718. The Post-Test value obtained an average value of 22.6410. The number of respondents or training participants used as research samples was 39 students. For the value of Std. The deviation (standard deviation) in the Pre Test is 2.70652, and Post Test is 2.69001. While the value of Std. Error Mean for Pre Test is 0.43339 and for Post Test is 0.43075

Because the average value of the results on the Pre Test is 18.8718 < Post Test 22.6410, descriptively, there is a difference in the average learning outcomes between the Pretest and the Post-Test results. Furthermore, to prove whether the Difference is real (significant) or not, we need to interpret the results of the paired sample t-test contained in the "Paired Samples Test" output table.

Table 2. Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretes & Postes	39	.941	.000

The output above shows the correlation test results or the relationship between the two data, or the relationship between the Pre Test variable and the Post Test variable. Based on the output above, it is known that the correlation coefficient (Correlation) is 0.941 with a significance value (Sig.) of 0.000. Because of the value of Sig. 0.000 < 0.05 probability, it can be said that there is a relationship between the Pre Test variable and the Post Test variable.

Table 3. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
Pair 1	**Pretes - Postes**	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
		-3.76923	.93080	.14905	-4.07096	-3.46750	-25.289	38	.000

Research Hypothesis Formulation

H0: There is no average difference between the Pre Test and Post Test results, which means that there is no effect of using online training scenarios in improving the professional ability of teachers in developing learning videos.

Ha: There is an average difference between the Pre Test and Post Test results, which means that there is an effect of using online training scenarios in improving the professional ability of teachers in developing learning videos.

Decision Making Guidelines in Paired Sample T-Test

According to Santoso (2014: 265), the guidelines for decision-making in the paired sample t-test based on the significance value (Sig.) of the SPSS output results are as follows. If the value of Sig. (2-tailed) < 0.05, then H0 is rejected, and Ha is accepted. On the other hand, if the value of Sig. (2-tailed) > 0.05, then H0 is accepted, and Ha is rejected.

Based on the "Paired Samples Test" output table above, it is known that the value of Sig (2-tailed) is 0.000 < 0.05, then H0 is rejected, and Ha is accepted. So it can be concluded that there is an average difference

between the Pre Test and Post Test results, which means that there is an effect of using online training scenarios in improving teachers' professional abilities in developing learning videos. The output table of the "Paired Samples Test" above also contains information about the scores. "Mean Paired Differences" is -3.76923. This value shows the difference between the average Pre Test results and the average Post Test results or 18.8718 - 22.6410 = -13.077. The difference between the differences is between -4.07096 -3.46750 (95% Confidence Interval of the Difference Lower and Upper).

DISCUSSION

Based on the results of quantitative analysis through the effectiveness test, it is known that the online training scenario effectively increases the Professional Competence of Economic Educators in developing Learning Videos. A qualitative analysis was carried out through a SWOT analysis to discover the strengths, weaknesses, opportunities, and obstacles to deepening the results obtained.

Strengths

In terms of strength, this Online Training Scenario has various advantages that can be considered in implementing activities in the field. Some of them are:

1) The characteristics of online meetings allow participants to take part in activities anywhere and anytime;

The current pandemic conditions require various academic activities to continue, one of which is teacher competency development. Support from existing technology has one advantage: ease of access and participation. Through technology supported by the internet network, training activities can be carried out even though the participants have different conditions.

> *"This online-based training activity helps teachers stay productive during the pandemic and gives a different impression because they have easy access to participate in all activities using existing facilities, such as zoom meetings, google forms and others" MIF (5/10/2021)*

This is in line with (Ajizah & Munawir, 2021) opinion that technology helps academics in terms of collaborating without being limited by space and time.

2) Activities are also considered efficient because they save time, cost, and energy;

Conventional training activities determine many things that participants must prepare. For example, you have to prepare accommodation to take part in activities. Must take the time to focus on the training that is followed so that it requires permission from the workplace or family. Through the applied scenarios, all of that can be resolved with online facilities that can be accessed without spending particular time or complicated accommodation preparations.

> *"In my opinion, activities like this are very good and effective without having to spend time working, accommodation costs, and not having to drain energy" F (5/10/2021)*

This is in line with the opinion of (Handayani, 2020), explaining the benefits that can be felt with online learning is that it can save energy because it can be accessed from home, where it is not limited by time or space.

3) The existence of material wealth obtained

Online-based training makes it easier for facilitators to provide various materials, ranging from presentation materials shared online, video media of various examples via YouTube, or communicating online. This supports the training participants to be able to get more references. The advantages of the online learning process are flexible use, complete reference sources, and adaptability to technology (Putra, 2021).

4) There is a sense of security in health because participants do not need to leave the house during the pandemic.

The pandemic period has hampered the mobility of academic activities. This is a significant obstacle in academic activities due to health and safety considerations. Through the training scenarios used, it is hoped that they can overcome security constraints and become a reference for new forms of activity during the pandemic.

> *"I think training activities like this are very suitable for the current pandemic conditions, so that teachers as participants do not need to leave their homes or schools. So it is safe from covid and can still complete other work activities" VBS (5/10/2021)*

Weaknesses

There are also possible weaknesses in the developed scenario considered for implementation in the field.

1) Does not represent the emotions of the trainees

Different motivations also sometimes make the training process vary for each participant. The motivation for continuous self-development is usually owned by participants who can complete each process well. However, some participants are only certificate-oriented; this makes the training process not optimal. This is evident from the fact that many participants turned off the camera during the training process or did not respond when invited to a discussion.

2) There is a sense of saturation during the training carried out

The diversity of training participants also makes the dynamics of the training process varied. The training participants consisted of prospective teachers, teachers, and professional teachers collaborating to participate in the online training activities carried out. The difference in age and experience gained also made the trainees experience several obstacles, such as feeling bored following the training. The results made some participants unable to complete the training targets given. There are several obstacles to online learning: students do not understand the material, feel tired and bored, and have no discussion activities with friends (Pujiasih, 2020).

3) Supporting facilities are needed

Several technologies and media are used in training activities, such as Kinemaster, Filmora, zoom, Google form, and WhatsApp. The application user has specific device standards that must be prepared, especially for video editing applications and meetings. This condition makes the trainees expected to be able to adjust the devices used so that the training activities run well.

> *"The training activity was exciting, but it didn't support it because of my laptop. Many signal and camera problems" ER (5/10/2021)*

One of the weaknesses in the online training process is that there are limitations in using supporting devices or media for online learning; this makes learning not optimal (Astuti & Baysha, 2021).

Opportunities

Opportunities generated from this Online Training Scenario can also be used as input for development in integrating new systems that can be widely adopted. Among them are as follows:

1) There is potential to increase the digital literacy of the trainees through the training materials and media used, including the communication media used.

Online activities were initially considered an obstacle for teachers to carry out academic activities. But now, along with the needs and existing habits. Almost all academic activities during the current pandemic are integrated with technology. This also encourages teachers to be able to master technology both in the teaching process and administratively. In line with (Sari, 2020) opinion, teachers are required to be technology literate and learn many things through online learning activities, especially online-based learning.

2) The emergence of new training scenarios that can be adapted during a pandemic.

The field of education is a particular field during a pandemic. This is because, under any circumstances, the educational process must continue for the students and the educators themselves. Competency training activities for educators must also continue to be pursued. The new training scenario is an option to replace the training that is usually done conventionally. One of them is the form of online training currently being implemented. Through this online training, conventional training activities are converted into digital form through the internet network, both in material delivery and practice, to the discussion and mentoring process.

3) Development of an integrated training system with online scenarios

The continuation of this insight into new scenarios of online training also has the potential to be integrated with technology. Many eLearning platforms are currently starting to develop Google Classroom, Edmodo, Schoology, Moodle, and many more. The online scenario that has been implemented now also has the potential to be integrated into one of the existing eLearning platforms. One example of integrating scenarios into the eLearning platform was also carried out by (Restendi et al., 2020). The Moodle-based remote training website can be reasonably based on the black box test. This can be seen from several aspects, such as the appearance and content of the website, its implementation, institutional readiness, and facilities and infrastructure.

Threats

Threats are negative potentials that may occur, especially in the applied online training scenario. Several threats need to be considered as follows:

1) There is an unstable internet network disturbance

The different backgrounds and varied conditions of the trainees also sometimes impact the implementation of the training. One of them is the ability of participants to prepare facilities or devices for training. The thing that most people complain about is network problems. This is indeed a significant challenge for the organizers. The availability of this internet network has very varied influencing factors ranging from geographical conditions, the financial ability of participants to subscribe to internet packages at home, the quality of internet service providers, and too unpredictable weather conditions. This is following the opinion of (Putra, 2021), explaining that the obstacles experienced when learning online are unstable communication signals, running out of internet quota, and limitations of the devices used.

2) various facilities/devices are sometimes not suitable for the specifications of the communication media used during training

Some of the media needed during online training also sometimes have device requirements at particular standards. Based on the implementation of the training, on average, the trainees already have devices, but sometimes the devices used are not following the required standards. This is because the technological understanding of the trainees, some of whom are elderly, is still lacking. This is following the opinion of (Anggianita et al., 2020) that there is still a lack of supporting facilities and infrastructure such as android and quotas.

3) The need for understanding digital citizenship ethics during training

Today's highly dynamic technology adaptation is significant. This is also related to the ethical use of technology, primarily digital technology. Digital technology will also reflect a person's self-image. There are many examples of participants' habits that are considered not good about online training. For example, not opening videos during training so that sometimes only accounts join but participants are not present so that their focus and awareness are on other activities, understanding of the features used for communication is also considered necessary so that trainees know the etiquette to speak, in addition to the attitude when conveying messages as well. Felt necessary how to dress and how communicate even though digitally.

Based on the SWOT analysis that has been carried out, the summary of the results can be described in the following Table 4.

Table 4. SWOT analysis

	Help in achieving goals	**Obstacles to achieving goals**
Influence from within	**Strengths** Easy to follow, Efficient, Wider material, Safe	**Weaknesses** Does not represent emotion, Fed up, Requires facilities with particular specifications
Influence from outside	**Opportunities** Digital literacy improvement, Development of new scenarios for teacher training during the pandemic, Development of a training system that is integrated with the developed online scenario	**Threats** Internet network disturbance, Devices that are not up to standard, Understanding of digital citizenship ethics

CONCLUSION

The pandemic condition cannot hinder the need for teachers to improve their competencies. Changes in academic conditions in various components of education also require teachers to adapt quickly to all existing conditions. For example, in the curriculum, administration, and learning process, learning media is used in the conditions of changing teaching patterns in the classroom. One of the critical competencies that teachers have is the mastery of teaching media. Various kinds of learning media can be used, but based on the analysis of existing needs, teacher competence in making learning videos during the pandemic is very much needed.

Various learning scenarios (online, offline, blended learning) and the process of applying learning media are proven to be able to collaborate with a learning video. On the other hand, the pandemic conditions also limit the mobility of teachers to be able to develop themselves. Online training scenarios are an alternative solution to overcome this. Based on the effectiveness test that has been carried out, it is known that the Online Training Scenario in the Pandemic Period is effective for increasing the Professional Competence of Economic Educators in Central Java in Developing Learning Videos.

In implementing the online training scenario, it is known that many exciting things happened. From the SWOT analysis, several conclusions can be drawn. Among them are the strength of online training scenarios having easy access, the efficiency of use, material wealth, and creating a sense of security during a pandemic. With this online training scenario, teachers can improve technological literacy in terms of opportunities. There are opportunities to develop new training scenarios that academics can integrate with the education system. However, some weaknesses must be watched out for. Specifically, the participant's emotions are not represented, boredom arises, and the need for standardization of the required facilities. This can pose challenges that must be considered, and the best solution is the disruption of the internet network, the need for appropriate devices, and the need for an understanding of digital citizenship ethics. The limitations of the study are participants just only the economic teachers and the professional competency measured by the process of making tutorial video only.

Declarations

Conflict of Interest

No potential conflicts of interest were disclosed by the author(s) with respect to the research, authorship, or publication of this article.

Ethics Approval

The formal ethics approval was granted by the Social and Human Sciences Research and Publication Ethics Committee of Satya Wacana Christian University. We conducted the study in accordance with the Helsinki Declaration in 1975.

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Research and Publication Ethics Statement

All information and writings contained in the article were obtained directly following the provisions of the academy and presented following the ethics of writing scientific papers. The study was approved by the research team's university ethics committee of the Satya Wacana Christian University. Hereby, we as the authors consciously assure that for the manuscript "Improving Professional Competence of Economic Educators in Creating Learning Videos Through Online Training Scenarios " the following is fulfilled:

- This material is the authors' own original work, which has not been previously published elsewhere.
- The paper reflects the authors' own research and analysis in a truthful and complete manner.
- The results are appropriately placed in the context of prior and existing research.
- All sources used are properly disclosed.

Contribution Rates of Authors to the Article

The first author is the executor of the research and the writer of the correlation foundation. The second author is the executor of the study and contributes to the writing of ideas.

REFERENCES

Ajizah, I., & Munawir, M. (2021). Urgensi teknologi pendidikan : Analisis kelebihan dan kekurangan teknologi pendidikan di era revolusi ındustri 4.0. *Journal of Chemical Information and Modeling*, *53*(9), 25–36. https://doi.org/https://doi.org/10.33853/istighna.v4i1.93

Aldholay, A., Abdullah, Z., Isaac, O., & Mutahar, A. M. (2020). Perspective of Yemeni students on use of online learning: Extending the information systems success model with transformational leadership and compatibility. *Information Technology and People*, *33*(1), 106–128. https://doi.org/10.1108/ITP-02-2018-0095

Anggianita, S., Yusnira, Y., & Rizal, M. S. (2020). Persepsi guru terhadap pembelajaran daring di sekolah dasar negeri 013 kumantan. *Journal of Education Research*, *1*(2), 177–182. https://doi.org/10.37985/joe.v1i2.18

Astuti, E. R. P., & Baysha, M. H. (2021). Analisis keunggulan dan kelemahan pembelajaran daring di program studi teknologi Pendidikan Universitas Pendidikan Mandalika. *Lentera Pendidikan Indonesia*, *2*(3), 123–

131. https://doi.org/https://doi.org/10.36312/lpi.v2i3.24

Barhoumi, C., Alsaysi, A., & Essid, S. (2022). Diagnosis of the effectiveness of the e-learning solutions adopted in Saudi higher education during the COVID-19 pandemic. *Online Information Review*, *46*(6), 1132–1151. https://doi.org/10.1108/OIR-02-2021-0078

Dudung, A. (2018). Kompetensı profesıonal guru. *JKKP (Jurnal Kesejahteraan Keluarga Dan Pendidikan)*, *5*(1), 9–19. https://doi.org/10.21009/jkkp.051.02

Grant, J. B., & Oerlemans, K. (2021). *Supporting Online Learners in Psychology: An Analysis of the Use of Videos in an Undergraduate Statistics Course* (pp. 9–24). https://doi.org/10.1108/s2055-364120210000040002

Handayani, L. (2020). Keuntungan, kendala, dan solusi pembelajaran online selama pandemi covid-19: Studi ekploratif di SMPN 3 Bae Kudus {Advantages, constraints, and solutions for online learning during the covid-19 pandemic: An explorative study at SMPN 3 Bae Kudus}. *Journal Industrial Engineering & Management Research*, *1*(2), 15–23. https://doi.org/https://doi.org/10.7777/jiemar.v1i2.36

Joshi, A., Vinay, M., & Bhaskar, P. (2020). Impact of coronavirus pandemic on the Indian education sector: Perspectives of teachers on online teaching and assessments. *Interactive Technology and Smart Education*, *18*(2), 205–226. https://doi.org/10.1108/ITSE-06-2020-0087

Kundu, A., Bej, T., & Dey, K. N. (2020). An empirical study on the correlation between teacher efficacy and ICT infrastructure. *International Journal of Information and Learning Technology*, *37*(4), 213–238. https://doi.org/10.1108/IJILT-04-2020-0050

Lo, C. M., Han, J., Wong, E. S. W., & Tang, C. C. (2020). Flexible learning with multicomponent blended learning mode for undergraduate chemistry courses in the pandemic of COVID-19. *Interactive Technology and Smart Education*, *18*(2), 175–188. https://doi.org/10.1108/ITSE-05-2020-0061

Ludwikowska, K. (2019). Teacher competence inventory: An empirical study on future-oriented competences of the teaching profession in higher education in India. *Education and Training*, *61*(9), 1123–1137. https://doi.org/10.1108/ET-12-2018-0266

Minaríková, E., Píšová, M., & Janík, T. (2015). Using video in teacher education: An example from the Czech Republic. *Advances in Research on Teaching*, *22*(B), 379–400. https://doi.org/10.1108/S1479-368720150000025018

Pujiasih, E. (2020). Membangun generası emas dengan varıası pembelajaran onlıne dı masa pandemı covıd-19. *Ideguru: Jurnal Karya Ilmiah Guru*, *5*(1), 42–48. https://doi.org/10.51169/ideguru.v5i1.136

Putra, A. P. (2021). Efektıfıtas pembelajaran onlıne selama pandemı covıd-19, metode dan evaluası. *Intersections*, *6*(1), 13–22. https://doi.org/10.47200/intersections.v6i1.588

Restendi, D., Nugraha, F., & Trianto, A. (2020). Pengembangan sistem pelatihan jarak jauh berbasis moodle di balai diklat keagamaan bandung. *Andragogi: Jurnal Diklat Teknis Pendidikan Dan Keagamaan*, *8*(2), 540–552. https://doi.org/10.36052/andragogi.v8i2.166

Sari, N. (2020). Problematika pelaksanaan pembelajaran daringmasa pandemic covid-19 di mın 3 medan. *Journal Of Education And Teaching Learning (JETL)*, *2*(3), 44–57. https://doi.org/10.51178/jetl.v2i3.67

Shohel, M. M. C., Ashrafuzzaman, M., Alam, A. S., Mahmud, A., Ahsan, M. S., & Islam, M. T. (2021). *Preparedness of Students for Future Teaching and Learning in Higher Education: A Bangladeshi Perspective* (pp. 29–56). https://doi.org/10.1108/s2055-364120210000041006

Tacconi, G., Tūtlys, V., Perini, M., & Gedvilienė, G. (2021). Development of pedagogical competencies of the vocational teachers in Italy and Lithuania: Implications of competence-based VET curriculum reforms. *European Journal of Training and Development*, *45*(6-7), 526–546. https://doi.org/10.1108/EJTD-03-2020-0041