Online-Based Academic Supervision during the Covid-19 Pandemic

Hasri Fendi¹, Imam Hanafi², Fenny Ayu Monia³, Sudarman⁴, M. Aries Taufiq⁵, Rahmi Eka Putri⁶

¹,⁴Universitas Islam Negeri Imam Bonjol, Padang, Indonesia
²Universitas Pahlawan Tuanku Tambusai, Bangkinang, Indonesia
³Universitas Negeri Padang, Padang, Indonesia
⁵,⁶Universitas Negeri Padang, Padang, Indonesia

* hasrifendi@uinib.ac.id

Abstract. The purpose of this study was to identify and to obtain information related to the problems in the academic supervision process encountered by the school principals during the Covid-19 pandemic. This study utilized a case study method to obtain data on the constraints and consequences of the Covid-19 pandemic on academic supervision activities at Senior High School (SMA N) in Bangkinang. Data were obtained through questions filled in Google form. The respondents in this study were 4 senior high school principals in Bangkinang. The results of this study were that during the Covid-19 pandemic, supervision was conducted online based on various types of online tools such as Google Meet, Zoom, Google duo and WhatsApp. However, the principals experienced several obstacles in conducting online-based academic supervision due to the absence of standard applications provided by the government to facilitate the process of supervision. Also many teachers did not master the use of information technology (IT).

Keywords: Supervision, Principals, Covid-19

1. Introduction

Indonesia and the world are currently facing the challenge of the Corona Virus Disease (Covid-19) outbreak which also has a major impact on the educational aspect. to overcome the spread of Covid-19, the government issued various policies such as social and physical distancing and large-scale social restrictions (PSBB). This means that all Indonesian citizens are required to work, worship, and study at home. As a result, education moves from a face-to-face system to being online-based.

The Government of the Republic of Indonesia through the Minister of Education and Culture (Mendikbud), Nadiem Anwar Makarim, released Circular Letter Number 4 of 2020 concerning the Implementation of Education in the Corona Virus Disease (Covid-19) Emergency situation [1]. During the Covid-19 pandemic, the school principal as the supervisor has shifted the form of conventional supervision into IT-based supervision so that the quality of education and teaching could be maintained and even improved. Utilizing Information and Technology (IT) has made it easier to carry out supervision in the Covid-19 pandemic period in which learning in the pandemic Covid-19 era has been directed towards digital-based learning.

Supervision activities refer to the ongoing efforts to stimulate, coordinate, and guide teachers’ development at schools both individually and collectively so that the learning process can run optimally in order to achieve the learning objectives. This is in line with Mukhtar saying that the supervision of school principals is the activity of observing, supervising, guiding, and stimulating the activities carried out by others with the aim of improving the learning process [2]. Since the learning process during the Covid-19 pandemic was conducted online, the supervision was also carried out online.

In this pandemic era, it was important for the principals as a supervisor to ensure the learning quality even though the teaching and learning process was carried out through online media. Therefore, a
supervision model that was appropriate to the learning needs in this pandemic was necessary. Adam and Dickey state that supervision is a service, especially concerned with instruction and its improvement [3]. It is directly concerned with teaching and learning and with the factors included in and related to these processes; teacher, pupils, curriculum, materials of instruction, sociophysical environment of the situation. In other words, the essence of the supervision activities is to help and foster teachers to develop their professional abilities, especially in the learning process, and all aspects related to the educational process such as teachers, students, curricula, learning materials, as well as maintaining a good and conducive learning environment that contribute to and improve the learning process.

Appiah in his research conducted in Ghana found that the need for effective supervision was recently more important than before [4]. Effective supervision methods especially during the Covid-19 pandemic period could help achieve good results in online-based teaching and learning. This implies that it is very important to continuously monitor and review the online teaching and learning procedures in order to ensure a good quality in achieving the objectives.

Therefore, to increase the academic supervision activities, it was crucial to provide supports and assistance from various components of education, especially in responding to the challenge of the Covid-19 pandemic period that demanded the educators to utilize technology and various aspects of education including aspects of supervision. Based on this, educational supervisors also must restructure the technology of resources and networks, not only to develop their role as supervisors, but also to understand how to apply the process of supervision properly in a highly digital context [5] [6] [7] [8]. For these reasons, the use of technology was expected to facilitate the work of principals as academic supervisors. In addition, supervision practices needed to be adapted to the online learning environment. This trend towards the virtualized education certainly required new ways to monitor, control, advise, and guide the entire school community for the development of interactive models and effective and appropriate virtual training [8] [9] [10].

The IT-based academic supervision model would certainly help the school principals to guide and train teachers to improve their professional competence even during the Covid-19 period, in which the supervision process could not be carried out directly or face-to-face. The use of high technology for academic supervision is an alternative to overcome the problem in implementing academic supervision [11]. In addition, Gunarto also emphasize that web-based applications offer a way of communicating and obtaining information using World Wide Web technology with the aim of providing teaching, manuals, rich materials, and collaborative learning that can be accessed anytime [12]. Based on the results of previous studies, it can be concluded that online supervision methods can be an alternative in solving problems in supervision, especially during the Covid-19 pandemic.

2. Methodology
This study was a descriptive qualitative research. The technique used in this study was a survey by gathering information from a number of people about a particular topic or issue. The study was conducted from 1st to 10th of April 2020 involving 4 principals from SMA Negeri in Bangkinang Kab. Kampar, Riau as the respondents. Data obtained through questions filled in Google form. Furthermore, the data were collected and analyzed to obtain the findings.

3. Result and Discussion
The governments had implemented Work from Home (WFH), and it was continued by the ministry of education by learning from home. This policy was an effort implemented in all communities to complete all works at home and education had become one of the areas affected by the Covid-19 supervision. Due to the limitation of interaction, the Ministry of Education issued a policy to dismiss schools and replace the teaching and learning process by using online supervision.

During the Covid-19 pandemic, teachers were required to master technology to support online learning. In the era of increasingly sophisticated technological disruption, teachers were demanded to have the ability in the field of learning technology. The teachers’ mastery of learning technology was so
varied that it became a challenge in the learning process. By working from home (WFH), the teachers were forced to master digital learning technology as a necessity for them. The demand of these needs allowed them to know online media that could support as a substitute for learning in the classroom, without reducing the quality of learning materials and the learning achievement targets.

Various distance learning media were tried and used, such as Zoom, Google Classroom, Google Meet, as well as WhatsApp. These applications were used optimally, as the media for conducting learning as in the classroom. By using online media, the ability to use and access technology must indirectly be increasingly mastered by students and teachers.

When educators were able to master a variety of online learning tools, there would thoughts about more varied learning methods and models that had never been done before from the educators. For example, a teacher created a creative video content as a teaching material. In this case, the teacher was more persuasive because he encouraged students to be more interested in the material provided by the teacher through the creative video. Students would certainly be able to understand the materials explained by the teacher through the creative video. Hence, the application of learning models at home made students not feel bored to attend the online learning.

Conducting online distance learning provided benefits such as increasing the awareness to master current technological advancements and overcoming problems of the educational process in Indonesia, including the aspect of supervision. For years, the supervisions were conducted through conventional methods, in which the supervisors visited to school and met the teachers face-to-face to investigate various kinds of problems related to the learning process. The problem was that the process of teaching and learning was conducted by using an online system; it was not possible to carry out conventional supervision. Thus, the supervision should be conducted by utilizing the technology.

All tasks and the model of distance learning were designed to remain meaningful, interesting, but not burdensome the students when studying at home during the pandemic. It was as mandated in the Circular Letter of the Minister of Education and Culture, the Regent, and the Head of the Education Department.

Changes in learning, as described previously, needed to be balanced and followed by changes in the supervision model made by the principals. The model applied should be adaptive to changes occurred in learning such as patterns and approaches, strategies and methods, tools or devices, management of the learning environment, and assessments. The main thing changed in terms of academic supervision of distance learning was that the supervision was carried out at a distance as well.

Supervision activities were continuous efforts to stimulate, coordinate, and guide the development of teachers at schools both individually and collectively so that the learning process could run optimally in order to achieve the learning objectives. This is in line with the opinion of Mukhtar saying that the supervision of school principals is the activity of observing, supervising, guiding, and stimulating activities carried out by others in order to improve the learning process [2].

Uhar also state that supervision is a service, especially concerned with instruction and its improvement [3]. It is directly concerned with teaching and learning and with the factors included in and related to these processes; teacher, pupils, curriculum, materials of instruction, socio-physical environment of the situation. In other words, the essence of the principal’s supervision activities was to help and foster teachers in developing their professional abilities, especially in the learning process and all aspects related to the educational process such as teachers, students, curriculum, learning materials as well as maintaining a good and conducive learning environment that contributed to and improved the learning process.

Olivia describe several academic supervision activities which are intended to: (a) assist teachers in planning the learning process; (b) assist the teachers in presenting learning materials; (c) assist the teachers in evaluating learning; (d) assist the teachers in managing the class; (e) help the teachers develop the curriculum; (f) assist the teacher in evaluating the curriculum; (g) assist teachers in evaluating themselves; (h) help teachers work together with groups; and (i) help teachers through in-service programs [13]. The point was that supervision was carried out to ensure that the distance learning conducted by teachers was carried out well and in accordance with the targets formulated.
An IT-based supervision was really necessary for the creation of supervision activities that fulfilled the expectations, without making it difficult for principals as supervisors to carry out supervision in the period of Covid-19 pandemic. Based on the results of the interviews conducted with the headmasters of SMA Negeri in Bangkinang Kota, it was concluded that:

1. The online supervising technique implemented by the principals was by asking the teachers to send a recording/ evidence of the learning process via e-mail or WhatsApp/ Telegram group

2. 60% of the school principals stated that there were still many teachers who were not able to use online learning facilities such as Google Classroom, Google Meet, and Zoom so they only gave assignments to students through WA.

3. 80% of the school principals stated that teachers could not streamline teaching and learning processes through online media due to various constraints such as: lack of ability in IT mastery, the large number of students, network constraints, and difficulties in explaining materials especially mathematics and physics that required whiteboards in material delivery process.

**Weaknesses and Strengths of IT-based Academic Supervision**

Every IT-based information system certainly has advantages and disadvantages, as well as IT-Based Academic Supervision. Among the advantages of IT-Based Academic Supervision were as follows:

a. IT-Based Academic Supervision could be accessed wherever and whenever without having to do the installation.

b. Regarding the issue of licensing (copyright), they did not need a license when using IT, including IT-Based Academic Supervision Information Systems, because the license was the responsibility of the application provider.

c. It could be run on any operating system. IT-Based Academic Supervision could be run in any operating system as long as there were a browser and internet access.

d. It could be accessed through many media, such as: computers, laptops, and mobile phones that were in accordance with WAP (Wireless Application Protocol) standards.

e. No high specification of computer was needed to use IT-Based Academic Supervision, because in some cases, most of the processes were carried out on IT server of the IT-based application providers.

In addition to the advantages above, IT-Based Academic Supervision also had several shortcomings, including the following:

a. A reliable and stable internet connection was required in order that the IT-based Academic Supervision could run well and smoothly.

b. A good security system was needed because the application was operated centrally, so if the center server was down, the application system could not run [14].

**4. Conclusion**

An innovation was needed in the implementation of Supervision during the Covid-19 pandemic. One of which was the implementation of online-based supervision. The effectiveness of the implementation of academic supervision by the school principals in SMA Negeri Bangkinang during the Covid-19 pandemic was carried out by the principals by doing: 1) requiring each teacher to report their teaching and learning activities regularly through online media such as email, whatsapp groups or telegrams; 2) improving the understanding and ability of teachers to carry out online-based learning; 3) periodically evaluating the learning process. Furthermore, barriers to supervision of the school principals during the Covid-19 pandemic included; 1) the lack of teachers ability to do online-based learning; 2) the limited ability of teachers to manage and impose effective learning models when learning through online media; 3) the teacher has difficulty in finding the right media in the online-based learning process. The follow-
up to academic supervision by the principals was to carry out ongoing coaching related to the online-based learning problems experienced by the teachers.

References

[1] Kemenristek Dikti, *Surat Edaran Nomor 3 Tahun 2020 tentang Pencegahan Corona Virus Disease (COVID-19).*

[2] Mukhtar & Iskandar, *Orientasi Baru Supervise Pendidikan.* Jakarta: Gaung Persadapress, 2013.

[3] Suharsaputra Uhar, *Supervisi Pendidikan: Pendekatan Sistem Berbasis Kinerja.* Bandung: PT Refika Aditama, 2018.

[4] M. R. Appiah, *A study of supervision in rural and urban junior high schools in the Akuapem North district.* University of Cape Coast, 2009.

[5] T. Clark, “Virtual Schools: Trends and Issues. A Study of Virtual Schools in the United States,” 2001, [Online]. Available: http://eric.ed.gov/?id=ED462923.

[6] J. Rutherford, “Technology in the schools,” *Technol. Soc.*, vol. 26, no. 2–3, pp. 149–160, 2004, doi: 10.1016/j.techsoc.2004.01.021.

[7] S. J. Zepeda, *Instructional supervision: Applying tools and concepts.* Taylor & Francis. 2016.

[8] E. Vázquez Cano and M. a L. Sevillano García, “Ict Strategies and Tools for the Improvement of Instructional Supervision. the Virtual Supervision,” *Turkish Online J. Educ. Technol.*, vol. 12, no. 1, pp. 77–87, 2013, [Online]. Available: http://ezproxy.lib.swin.edu.au/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=85319838&site=ehost-live&scope=site.

[9] L. S. Behar-Horenstein, G. S. Mitchell, and T. A. Dolan, “A multidimensional model for analyzing educational processes,” *Int. J. Leadersh. Educ.*, vol. 7, no. 2, pp. 165–180, 2004, doi: 10.1080/1360312042000189280.

[10] J. Larreamendy-Joerns and G. Leinhardt, “Going the Distance With Online Education,” *Rev. Educ. Res.*, vol. 76, pp. 567–605, Dec. 2006, doi: 10.3102/0034654306004567.

[11] E. W. T. Chan, S.C.H & Ngai, “A Qualitative Study Of Information Technology Adoption: How Ten Organizations Adopted Web-Based Training,” *J. Dep. Manag.*, 2007.

[12] A. R. R. David Guntoro, Totok Sumaryanto F, “Pengembangan Model Supervisi Akademik Berbasis Web,” *Educ. Manag. Major Themes Educ.*, vol. 5, no. 2, pp. 122–128, 2016, doi: 10.4324/9780203463383.

[13] P. F. Oliva and G. E. Pawlas, *Supervision for Today’s Schools. 7th Edition.* 2004.

[14] Watid Asas, “Perancangan Pembuatan Sistem Informasi Supervisi Manajerial dan Akademik Pengawas (SIMAP) berbasis Web pada Pengawas Guru PAI dan Madrasah di Kabupaten Cilacap,” IAIN Purwakerto, 2017.