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Implementation of Web-Based Supervision for Guidance and Counseling Teachers

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Abstract

Guidance and counseling implementation supervision in schools is still far from being ideal. It is crucial to supervise and develop human resources (human resources development) to improve the quality of guidance and counseling services in school and carried out on an ongoing basis. Supervision is rare, not even carried out by supervisors or principals who feel a lack of time, so they do not have time to carry out it optimally, weather this is allowed to continue the negative effect of guidance and counseling teachers. The aims of this study is to produce supervision in the form of a web-based application. Development of a website-based supervision monitoring system aims to facilitate the supervision monitoring process and consultation of guidance counselors and school principals. A waterfall method used at process in developing this system regarding the functional requirements of one non-functional requirement. An implemented system in several programming languages like HTML, CSS, javacript, and PHP that use laravel as a framework. In addition, this system also uses Twitter's API and the Naïve Bayes method library to assist in the process of retrieving teacher tweet status data. System testing carried out by using the white box method for unit and integration testing and the black box for validation testing. This test produces 100% valid in 85 test cases. Non-functional requirements of the system have been tested by the Sortsite tool, showing that this website operated on multiple search engines.

Keywords: Supervision, Web, Teacher Guidance and Counseling Introduction

1. Introduction

Supervision is the most important part of guidance and counseling services, but it still receives serious attention from counselors, school principals, and supervisors [1]. [2] The supervision of guidance and counseling teachers in SMA is inadequate and tends to be busier on administration. [3] Supervision is ineffective because it does not follow existing instruction, and is more concerned with administrative matters than educational function and professional development of counselors. The implementation of counseling supervision in several regions of Indonesia has not run optimally [4], [5]. [6] Supervision instruments are still paper and pencil based [7], and there is still an imbalance in the number of supervisors and schools. In line, [8] obstacles to the implementation of supervision are the limited time of school principals and the factors of educational resources (supervisors). According to the research, [9] obstacles for school principals in carrying out supervision have more complicated activities. Based on the research result [10] explains that the implementation of supervision carried out by supervisors tends to investigate and corrective to find teacher errors supervisors who have expected to carry out the following functions according to [11] diagnosing and assessing, planning, motivating, rewarding, and reporting progress. The school supervisors and principals feel a lack of time, so they do not have time to supervise optimally [12]. [13] It states that the implementation of supervision in guidance and counseling has not done by the experts who compete in their fields. Therefore, based on the problems above, needs of an effective supervision service model in using guidance implementation and counseling is essential and must be developed immediately

If this continues, it will have a negative impact on counselors, guidance and counseling programs, students and schools. Even though the implementation of proper counseling supervision will have many positive impacts on

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improving counselor performance in terms of personal competence, professional competence, and counselor self-efficacy [15], [16], [17], [18], [19]. In addition, there is a positive and significant relationship between the implementation of supervisory academic supervision and the performance of school counselors [20]. According to [21] the functions of guidance and counseling supervision are to monitor, record, provide support, measure and assess performance and encourage reflection, because guidance and counseling teachers (counselors) are professions that have professional standards [22].

One effort that can be made is to develop a new model of supervising counselors in improving their performance. One that needs to be developed is an application that can help performance, because the application in terms of data processing results is more practical, easy and fast [23], [24]. Computer applications are usually created to make it easier for humans to do a task on a computer, such as processing data or editing [25]. [26], [27] argue that the supervision process can be used as a part of the process of maturing or developing self-qualities as well as a lifelong professional learning process. The application to be developed is a web application-based e-supervision. Web-based supervision offers several implementations of supervision using the help of web-based internet technology and builds communication and virtual communities between supervisors and assisted teachers [28] [29].

2. Methods

This research refers to the Borg and Gall concept known as the "research and development" cycle consisting of studying research results to develop products based on study findings, conducting field tests, and finally improving the product based on field findings.

The stages carried out consisted of the Initial Research and Product Manufacturing Stages.

A. Preliminary Research

In the preliminary stage there are two stages, namely reviewing through literature studies and preliminary field studies. A literature study was carried out to conduct a literature review on the implementation of web-based supervision for guidance and counseling teachers, then the researchers analyzed the results of relevant previous research. Meanwhile, a preliminary field study aimed o find out how the existing factual conditions were about how to describe objective conditions regarding the implementation of supervision and about the needs actual results of the web application-based e-supervision model for guidance and counseling teachers.

As a final step, the researcher compares the findings in the field with relevant theoretical and research studies in order to find discrepancies between field findings and the literature review to then serve as a basis for developing an objective and ideal model.

B. Product Manufacturing Stage

Making products as a result of finding problems previously obtained is carried out at this stage, after finding problems in implementing web-based supervision based on preliminary research. This stage consists of designing product designs, optimizing prototypes and evaluation. In the evaluation activity is the product evaluation stage that has been made. The product is tested in the initial field on a limited scale through design validation to assess whether the rational design of the product will be more effective than the old model or not. The steps taken in this stage are, feasibility test through expert validation of 2 (two) people. 1 (one) guidance and counseling expert to assess aspects of the supervision model from the scientific side of guidance and counseling and 1 (one) expert validation regarding web-based applications. For the feasibility of the model in the field, it takes 2 (two) practitioners consisting of 1 (one) school principal and 1 (one) high school supervisor to assess the feasibility of the model components that suit the purposes of guidance and counseling. Describe the results of the various inputs and suggestions for improving the hypothetical model. In the product manufacturing stage, namely first identifying the research problem and solving it by drawing conclusions. The process of this research method can be seen in Figure 1.

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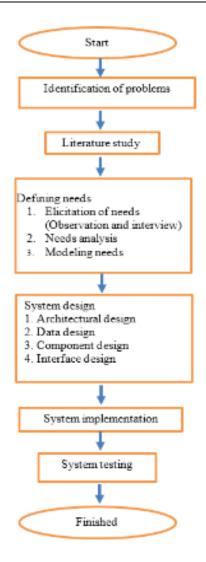


Figure 1. Research Flowchart

3. Results And Discussion

A. Preliminary Research

Test the literature on web-based supervision, namely through previous related studies including: Research [30] on the Development of Web-Based Website-Based Managerial Supervision Assessment Instruments for PAUD School Principals. Research entitled, implementation of quality e-supervision application-based academic supervision in the Ponrogo sub-district education service office during the Covid-19 pandemic [31]. With the title implementation of the digital academic supervision model (e-supervision) in the era of the co-19 pandemic [32]. Educational supervision in the era of technology 5.0 [33] explains that educational supervision is the best teaching and learning process, which involves teachers and students, through a series of actions, guidance and directions. Improving the teaching and learning process is the achievement. Research entitled development of teacher performance monitoring applications to improve the quality of web-based learning (case study: SDN Mulyorejo 1 Malang) [34]. [34] Model of Electronic Assisted Academic Supervision for Madrasa Supervisors in Central Java Province. [36] Web-based application of academic supervision assessment at Madinaturramlah Islamic Elementary School, Banjarmasin City. Research on digital-based academic supervision models for madrasah supervisors in Kab. Cirebon, [37]. [38] research on guidance and counseling supervision in schools: problems and alternative solutions. An effective method that can be used by madrasa supervisors at this time in carrying out

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their duties and functions, including providing guidance, is the online method or electronically assisted supervision or digital supervision.

Based on preliminary field studies conducted through interviews with school principals regarding the implementation of supervision in the field, it was concluded that the problem was that there was limited time in carrying out intensive supervision for guidance and counseling teachers, a supervisor was not from the same scientific field, there was rarely follow-up of weaknesses and strengths after supervised, instead of supervising guidance and counseling teachers are asked to submit reports or accountability reports only, in the implementation of supervision there is no uniformity of instruments, lack of human resources in carrying out supervision, is a formality and only administrative in nature. In fact, if the school principal's guidance and monitoring process is carried out intensively by holding formal meetings, it will result in a large amount of effective face-to-face time between teachers and students being confiscated. During the guidance and counseling process, it should not interfere with school activities, so we take an approach that is able to maintain the effectiveness of the guidance and counseling supervision process using electronic means.

Based on the analysis of literature and field tests, it can be concluded that identifying needs is useful for describing what needs must be met by the software from the actor's point of view through the system's user interface. Based on the needs elicitation process for informants, 4 actors were found in the system, including visitors, admins, guidance and counseling teachers) and students as shown in

No	Actor	Characteristics	
1	Visitors	isitors Visitors are all people who can open the system but have not logged into the system su	
as students, tutors and others.		as students, tutors and others.	
2	Admin	Admin The admin has a role to control the account management process then it is entered in	
		the system. The admin actor will be run by the principal of a school.	
3	Headmaster The principal has a role in supervising teachers starting from making instrum		
		checking the results of instrument entries and providing follow-up directions to guidance	
		and counseling teachers	
4	Teacher	Guidance and Counseling Teachers have a role as supervised subjects, namely by filling	
	Guidance	out and completing the instruments that have been made correctly.	
	Counselling		

Table 1. Web-based actor supervision

B. Roduct Manufacturing Stage

There are two stages of development, namely the process of designing and implementing the results of the previous analysis in the form of a website. In designing a system divided into four parts: interface design, data, architecture, and components. Furthermore, in implementing the software, it will be explained about the specifications needed for development, implementation limitations, program code implementation, and implementation of the software interface used when implementing system development.

1. Architectural Design

This stage first begins by drawing a sequence diagram with the aim of representing the relationship between actors and each class and object in the system. Then the next step is to draw Class diagrams representing objects and relations that are used during the process of developing a software. During the development process, the method used is the Model View Controller (MVC) which aims to facilitate architectural design. Class diagram details are in Figure 2

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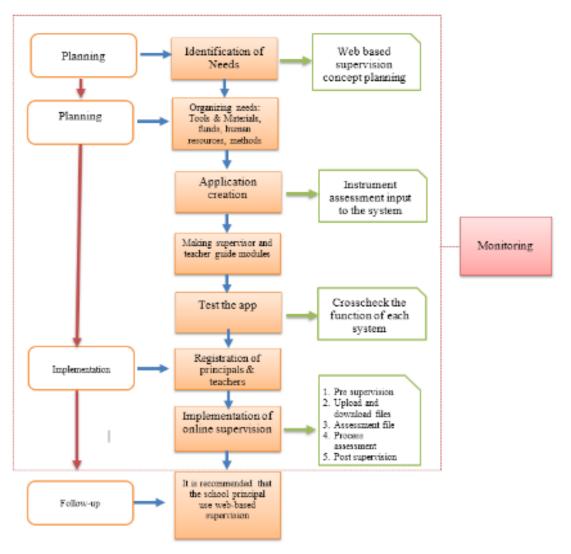


Figure. 2. Web Based Supervision Model

2. Component Design

This stage has the main focus on designing the processing logic flow of a function. Component design will be represented in the form of an algorithm/pseudocode.

3. Data Design

This stage is made as a basis when creating a database including tables, columns and attributes during the development process. Design data is represented using a Physical Data Model (PDM).

4. Interface Design

In the process of realizing the system user interface, the interface design is taken as the basis. interface design is carried out by considering the aesthetic value of the system interface and the comfort of users using the system. The design of the student dashboard page interface is shown in Figure 3.

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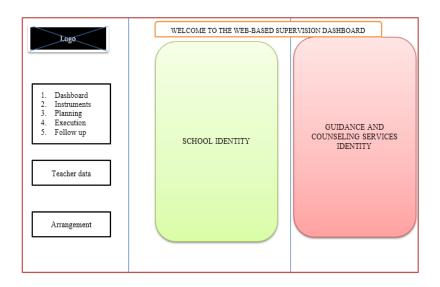


Figure 3. Dashboard Page Interface Design

5. System Specifications

There are two types of system specifications described, namely hardware specifications and software specifications.

a. Hardware Specifications

The process of implementing this Website-Based Supervision Monitoring System is carried out using computer hardware/hardware specifications as shown in Table 2.

 Component Name
 Specification

 Prosesor
 Intel® Core™ i5-8250U CPU @ 1.60GHz 1.80 GHz

 Memory (RAM)
 8,00 GB

 Hard Disk
 1 TB

 Graphics Card
 AMD Radeon

 Model Name
 HP 14s-cf0045tx

Table 2. Hardware Specifications

b. Software Specifications

The process of implementing the Website-Based Supervision Monitoring System is carried out using software specifications as shown in Table 3.

Table 3. Software Specifications

Component Name	Specification
Operating system	Windows 10 Single Language 64-Bit
Web Server	XAMPP Versi 3.2.2
Text Editor	Atom Versi 1.43.0
Brwoser	Google Chrome

6. System Limitation

Limitations in the process of implementing the Website-Based Supervision Monitoring System, including:

- a. System development is carried out using the Laravel Framework version a. 5.3.
- b. This system has been developed in HTML, JavaScript, PHP and CSS programming languages.
- c. MySql is used to perform database management.

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d. Object Oriented Programming as the basis for developme

7. Program Code Implementation

After completing the design process, the design results from the algorithm will be used as the basis for the program code implementation process. Then the choice of programming language is very important in this process. The coding process will be adjusted to the rules of the programming language used

8. Interface Implementation

After completing the design process, the results are then used as a reference in the interface implementation process. This process was developed using templates available in CSS and HTML as well as assistance from Bootstrap as well as Jquery. The implementation image of the dashboard page is shown in Figure 4.

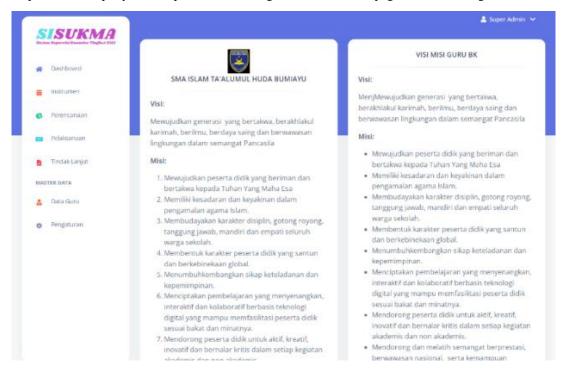


Figure 4. Page Interface Implementation

The display dashboard on the supervisor page

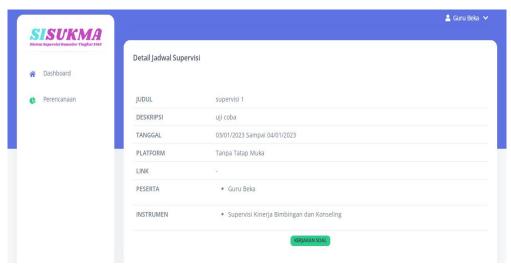


Figure 5. Page Interface Implementation

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The display dashboard on the guidance and counseling teacher page

4. Testing

The system has been tested by testing two types of requirements. The first is testing the functional requirements of the software using two different methods, namely white box and black box. This test is used to test the completeness between the stated requirements and the running system. The white box method is applied to several types of testing, namely at the unit level and system integration. Before testing, it is necessary to describe the independent path as a test object obtained from the flowgraph of the three sample methods of the main features of the system, namely the supervision feature, ordering the supervision implementation schedule. Integration testing is carried out by testing the integration between the add teacher () method on C_guru and M_Students with a whitebox testing approach. Whitebox testing generates 100% valid test cases. The blackbox testing method is used to test system validation. The use case scenario table was used in the test case formation process in this test, and a total of 85 test cases and 100% valid test results were obtained. Non-functional testing will be carried out to test the compatibility of the software when running on various types of search engines. The second is non-functional testing using auxiliary tools, namely the Sortsite application to determine system capabilities. Based on this test, it is known that this system can run on several types of search engines (browsers), including: Chrome version 79, Firefox version 72, IE version 11, Edge version 79, Safari version 13, Opera version 66, iOS and Android.

5. Conclusion

Based on the results of the development of a web-based supervision system, it can be concluded that this system is intended for supervising guidance and counseling teachers at the high school level (high school), consulting logbook features and follow-up. There are two types of requirements used, namely 35 requirements of the functional type and one requirement which is non-functional. The system development process is divided into four parts, namely defining requirements, designing, implementing and testing the system. The implementation process is also carried out using the help of the Twitter API and a text classification library that applies the Naïve Bayes method. The testing phase is carried out by testing all types of requirements, namely functional and non-functional system requirements as well as two testing methods, namely white box and black box. While non-functional testing uses the Sortsite application tool. All tests produce 100% valid.

6. Advice

So then here are some considerations that can be used when the next research process is carried out, namely by adding an automatic notification feature to the account of the principal and guidance and counseling teacher who will supervise in improving the performance of guidance and counseling teachers, developing a tweet status analysis method by multiplying language variations, adding a notification feature to the bk teacher account when a teacher orders a supervision schedule so that the confirmation process will be faster and adding notification features to the bk teacher account when the available consultation schedule has run out.

References

- 1. Jarkawi, J., Abidarda, Y., & Mahfus, M. (2020). pengembangan manajemen usaha rekontruksi assesment dan intervensi (murai) pada pelaksanaan layanan bk di wilayah lahan rawa. *Jurnal Mahasiswa BK An-Nur: Berbeda, Bermakna, Mulia, 6*(4), 37–42.
- 2. Kusumah, T. B. (2016). elaksanaan Supervisi Guru Bimbingan dan Konseling di Kabupaten Cirebon (Skripsi, Universitas Pendidikan Indonesia).
- 3. Rahmawati, E. (2020). Dampak Supervisi Bimbingan dan Konseling Terhadap Kinerja Guru BK: Studi Kasus di SMA Kabupaten Majalengka (Tesis, Universitas Pendidikan Indonesia).
- 4. Himdani, H., Pramono, S. E., & Awalya, A. (2017). Pengembangan model supervisi klinis teknik konseling kelompok pada guru BK SMA Kabupaten Lombok Timur. Educational Management, 6(1), 1–8.
- 5. Yunani, A., Utami, F. P., Yusnita, V., Yeni, A., & Azwar, B. (2021). pengaruh supervisi bimbingan konseling terhadap efektivitas pelaksanaan program bk di sekolah (studi kasus di 30 smp provinsi bengkulu tahun 2020). International Virtual Conference on Islamic Guidance and Counseling, 1(1), 82–93.

eISSN: 2589-7799

2023 August; 6 (10s): 530-539

6. Deni Setiawan, Sulhadi Sulhadi, Aprianus Umbu Zogara, (2019) Pengembangan Alat Ukur Supervisi Klinis Berbasis Mobile Phone Dalam Rangka Peningkatan Mutu Pendidikan. Jurnal Inovasi Teknologi Pendidikan. Volume 6, No 2, (208-219) Online: http://journal.uny.ac.id/index.php/jitp vid Moto Lele * 1,

- 7. Muzayanah, U. (2016). Kualitas Kinerja Pengawas Madrasah Dalam Perspektif Guru Dan Kepala Sekolah (Analisis Perbandingan Kepuasan Guru dan Kepala MI terhadap Supervisi Pengawas Madrasah di Sukoharjo dan Surakarta Jawa Tengah). Al- Qalam, 22(2). https://doi.org/10.31969/alq.v22i2.318
- 8. Lauma, Ismail dan Pido, Siti Asiah T. 2018. Efektivitas Pelaksanaan Supervisi Kepala Sekolah Terhadap Standar Proses Pembelajaran Pendidikan Agama Islam Di SMK Negeri 1 Kaidipang Kabupaten Bolaang Mongondow Utara. Jurnal Ilmiah Al- Jauhari (JIAJ) Studi Islam dan Interdisipliner Volume 3 No 2 September 2018 ISSN 2541-3430
- 9. Dewi, Fatma. 2019. Implementasi Supervisi Pendidikan Dalam Meningkatkan Proses Pembelajaran Di Sekolah Dasar. Prosiding Seminar Nasional Pendidikan Program Pascasarjana Universitas PGRI Palembang 03 Mei 2019.
- 10. Riyanto (2015). Manajemen Kepala Sekolah Dalam Melaksanakaan Supervisi Akademik Di SMA Negeri 5 Lubuklinggau. Vol 9, No 1. jurnal manajemen pendidikan. E- ISSN 2623-0208 and P-ISSN: 1979-732X. https://ejournal.unib.ac.id/index.php/manajerpendidikan/article/view/1097/908
- 11. Aziz A. (2017). Supervisi Pendekatan Klinik. Pancawahana: Jurnal Studi Islam, Vol.12(1), 66-83
- 12. Imawanty, A. B. F. (2019). *Optimalisasi asesmen dan evaluasi bimbingan dan konseling dengan memanfaatkan aplikasi formulir daring jotform*. Proceeding Konvensi Nasional XXI Asosiasi Bimbingan dan Konseling Indonesia, Bandung, 27-29 April 2019 April, http://proceedings.upi.edu/index.php/konvensiabkinxxi/article/view/464/416
- 13. Wutsqo.at.all.(2021) Masalah kompetensi supervisor dalam supervisi bimbingan Dan konseling. *Jurnal Selaras: Kajian Bimbingan dan Konseling serta Psikologi Pendidikan* Volume 4, Number 1, p. 51-59 ISSN 2621-0606 (Print) | ISSN 2621-0614 (Online) DOI: https://doi.org/10.33541/Jsvol2iss1pp1 Open Access | Url: http://ejournal.uki.ac.id/index.php/sel/about
- 14. Eryılmaz, A., & Mutlu, T. (2017). Developing the four-stage-supervision model for counselor trainees. *Kuram ve Uygulamada Egitim Bilimleri*, 17(2), 597–629. https://doi.org/10.12738/estp.2017.2.2253
- 15. Kurniati, D., Musyofah, T., & Ojil, A. P. (2021). Pelaksanaan Supervisi Bimbingan Konseling Dalam Meningkatkan Keterampilan Layanan Konseling Guru BK SMA Kabupaten Rejang Lebong. *Islamic Counseling: Jurnal Bimbingan Dan Konseling Islam*, 5(1), 133–148.
- 16. Putri, F. R. (2018). Pengaruh Supervisi Bimbingan Dan Konseling Terhadap Kinerja Guru Bimbingan Dan Konseling SMA Negeri SeKota Jambi. *Kinerja Guru BK, Supervisi BK*.
- 17. Rahmawati, E. (2020). Dampak Supervisi Bimbingan dan Konseling Terhadap Kinerja Guru BK: Studi Kasus di SMA Kabupaten Majalengka (Tesis, Universitas Pendidikan Indonesia).
- 18. Tang, A. (2020). The impact of school counseling supervision on practicing school counselors' self-efficacy in building a comprehensive school counseling program. Professional School Counseling, 23(1), 2156759X20947723.
- 19. *Wirata*, I. M. S., NATAJAYA, D. R. I. N., & DANTES, K. R. (2015). Kontribusi Supervisi Bimbingan Konseling, Iklim Kerja Sekolah Dan Kepuasan Kerja Guru Terhadap Kinerja Guru Pembimbing SMA Se Kabupaten Tabanan. *Jurnal Administrasi Pendidikan Indonesia*, 6(1).
- 20. Gunawan, H. (2016). Hubungan Supervisi Akademik Pengawas, Pengetahuan Evaluasi Bimbingan dan Konseling dengan Kinerja Konselor SMA Negeri di Kota Makassar (Tesis, Pascasarjana Universitas Negeri Makassar).
- Mashudi, Farid. (2013). Panduan Evaluasi Dan Supervisi Bimbingan Dan Konseling. Jogjakarta: DIVA Press
- 22. Awalya et. All (2020). Students Perception about Counselors Communication Skills: The Differences Based on Gender and Grades in Junior High Schools. *Islamic Guidance and Counseling Journal* Vol. 3, No. 2, pp. 83-92 https://journal.iaimnumetrolampung.ac.id/index.php/igcj
- 23. Ifdil I et al., (2017). Pengolahan Alat Ungkap Masalah (AUM) dengan Menggunakan Komputer Bagi Konselor. *Jurnal Aplikasi IPTEK Indonesia*. Vol 1, No 1 . ISSN: 2614-2465 DOI: 10.24036/4.113. 10.24036/4.113 . http://bk.ppj.unp.ac.id/index.php/aiptekin/article/view/3
- 24. Sugiharni, G. A. D., Ardana, I. M., Suharta, I. G. P., & Sudiarta, I. G. P. (2022). Development of Mathematics Web-based Learning on Table Set-Up Activities. *International Journal of Advanced Computer Science and Applications*, *13*(3), 89–98. https://doi.org/10.14569/IJACSA.2022.0130314
- 25. Hsu, C.-M. (2013). The Construction of a Web-Based Learning Platform from the Perspective of Computer Support for Collaborative Design. *International Journal of Online Pedagogy and Course Design*, *3*(4), 44–67. https://doi.org/10.4018/ijopcd.2013100104

eISSN: 2589-7799

2023 August; 6 (10s): 530-539

- 26. Flanagan, P. G., Gee, S., Holden, L., McGoran, M., Meyenberg, L. A., Pringle, G., & Townend, H. (2021). Supervision and continuing professional development: Supervisors' hopes for meaningful, supervision-supported CPD.
- 27. Taufiq, A. (2018). Model Supervisi yang Membelajarkan Bagi Konselor Sekolah dan Profesi Sejenis. *PEDAGOGIA*, 15(3), 224–232.
- 28. Valerie, L. (2012). Online Supervision of Field Education. *Iternational Journal Field Educator Simmon School of Social Work*, Vol.2(1):215-219
- 29. Madhusudhana, K. (2018). Learner cognitive behavior and influencing factors in web-based learning environment. *International Journal of Advanced Computer Science and Applications*, 9(8), 542–546. https://doi.org/10.14569/ijacsa.2018.090868
- 30. Yussanti, D. W., & Dwikurnaningsih, Y. (2020). Pengembangan Instrumen Penilaian Supervisi Manajerial Kepala Sekolah PAUD Berbasis Website. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 10(3), 217–230. https://doi.org/10.24246/j.js.2020.v10.i3.p217-230
- 31. Novitasari, T. I., & Hariyati, N. (2021). Implementasi Supervisi Akademik Berbasis Aplikasi E-Supervisi Mutu Di Kantor Pelayanan Pendidikan Kecamatan Ponrogo Pada Masa Pandemi Covid-19. *Jurnal Inspirasi Manajemen Pendidikan Volume*, 09(4), 833–845. https://ejournal.unesa.ac.id/index.php/inspirasi-manajemen-pendidikan/article/view/40792
- 32. Ma'ayis, S., & Syahidul Haq, M. (2022). Implementasi model supervisi akademik berbasis digital. *Jurnal Inspirasi Manajemen Pendidikan*, 10(1), 142–155.
- 33. Mahlopi. (2022). Supervisi Pendidikan Era Teknologi 5.0. *Adiba: Journal of Education*, 2(1), 133–141. https://adisampublisher.org/index.php/adiba/article/view/79
- 34. Reyhans, M. D., Cholissodin, I., & Adinugroho, S. (2021). Pengembangan Aplikasi Pemantauan Kinerja Guru untuk Peningkatan Kualitas Pembelajaran berbasis Web (Studi Kasus: SDN Mulyorejo 1 Malang). ... *Informasi Dan Ilmu Komputer e ...*, 5(2), 769–778. http://j-ptiik.ub.ac.id/index.php/j-ptiik/article/view/8635%0Ahttp://j-ptiik.ub.ac.id/index.php/j-ptiik/article/download/8635/3966
- 35. Prilianti, R. (2020). Model Supervisi Akademik Berbantuan Elektronik bagi Pengawas Madrasah di Provinsi Jawa Tengah. *Prosiding Seminar Nasional Pascasarjana 2020, 1*(1), 1–12. https://proceeding.unnes.ac.id/index.php/snpasca/article/download/610/529
- 36. Alpisyah, S., Setiawan, A., & Sari, M. (2021). *Aplikasi Penilaian Supervisi Akademik Pada Sd Islam Madinaturramlah Kota Banjarmasin Berbasis Web*. 61410717. http://eprints.uniska-bjm.ac.id/4391/%0Ahttp://eprints.uniska-bjm.ac.id/4391/1/Jurnal_Syaidah Alpisyah 15630369.pdf
- 37. Pengajaran, A. M.-J. P. dan, & 2022, undefined. (2022). Model Supervisi Akademik Berbasis Digital Bagi Pengawas Madrasah di Kab. Cirebon. *Pijar.Saepublisher.Com*, *1*(2), 1–1. http://pijar.saepublisher.com/index.php/jpp/artic
- 38. Diswantika, N., Kartadinata, S., Supriatna, M., & Indonesia, U. P. (2022). Jurnal Mahasiswa BK An-Nur: Berbeda, Bermakna, Mulia Volume 8 Nomor 1 Tahun 2022 Tersedia Online: https://ojs.uniska-bjm.ac.id/index.php/AN-NUR STKIP-PGRI Bandar Lampung Dipublikasikan Oleh: UPT Publikasi dan Pengelolaan Jurnal Universitas Islam Kali. 8, 57–73. https://ojs.uniska-bjm.ac.id/index.php/AN-NUR/article/viewFile/8638/4681