

USING GOOGLE WORKSPACE FOR EDUCATION AS A FOUNDATION FOR DATA GOVERNANCE AND STUDENT SERVICES IN HIGHER EDUCATION

Iwan Sopwandin¹⁾, Akhmad Junaidi²⁾

¹Sekolah Tinggi Ilmu Tarbiyah Az Zahra Tasikmalaya

²Universitas Islam Negeri Raden Intan Lampung

Email correspondence: iwansopwandin8@gmail.com

Article History:

Received: 2024-08-20, Accepted: 2024-11-10, Published: 2024-12-31

Abstract

Student service is one of the indicators to measure the quality of higher education. Its convenience will create comfort for students which will lead to satisfaction; that is one of the assessment aspects in institution accreditation. When the students are satisfied with the service, it will also become free marketing to the community. This study aims to analyze the use of Google Workspace for Education as a basis for data governance and student services in higher education. The method used in this study was qualitative with a descriptive analysis approach. The data were collected through observation, interviews, and documentation studies. The data analysis techniques were using interactive models of Miles and Huberman that consisted of data condensation, data presentation and conclusions drawing. The validity test of the data was carried out through observation and triangulation. The results of this study indicated that Sekolah Tinggi Ilmu Tarbiyah Az Zahra Tasikmalaya has been using Google Workspace for Education as the basis for data management and student services by utilizing Google Drive, Google Forms, Google Documents, Google Spreadsheets, Google Slides, Google Meet and Google Sites features. These features are used as data storage media, attendance lists, generating certificates, issuing active letter and research permits, webinars, and student admission pages. The impact of using Google Workspace for Education has been greatly perceived by students, as well as by other parties. The use of Google Workspace for Education has given some benefits, namely: 1) Effectiveness, such as a fast service in issuing an active letter for the students that will be sent automatically via email, and non-face-to-face service in administration office unless when there are some problems in its application; 2) Efficiency, for new universities that are still in adjustment, one of which is financial aspect, where Google Workspace for Education can be an alternative that can be used in providing services to students, because the necessary features can be accessed for free.

Keywords: Google Workspace For Education, Data Governance, Student Services

INTRODUCTION

In Indonesia, the education aspect has grown rapidly, including higher education. Higher education institutions are varied, from state universities, private universities, civil service colleges, to religious universities (PDDikti, 2024). In 2023, higher education institutions in Indonesia will be the second largest in the world behind India, with 3,788 institutions (Zulfikar, 2024).

This large number of universities bring positive and negative impacts. It becomes an accomplishment because there are a large number of higher educations that can give educational service in this country. However, the quantity must go hand in hand with the quality given to all parties, especially the students who study in the institution (Mutmainah, et

al., 2024). Therefore, the students will be comfortable during their study, and obtain equal rights with other students in other universities (Putri, et al., 2021).

Unfortunately, it is surely not easy especially in the present time where all sectors must be digital-based, of course it is a real challenge faced by universities (Ardiansyah, 2022). If it cannot be balanced by the university, it will have a huge impact. It can obstruct the governance process as well as the satisfaction of all levels in the university, from the leadership level, lecturers, students, education staff, the community and the stakeholders who will later employ the alumni.

The real challenge is faced by private universities because they do not directly receive government funding. They need to work hard finding their own funding aside from the students' tuition fee, such as having cooperation with other parties, creating a business, or providing services in many sectors. If the private universities only depend on the tuition fees, it will be hard to develop the institution following the trends. It has been widely known that in private universities, some students may have difficulties and delay paying their tuition while it becomes the main resource for the institution (Ardiansyah et al, 2022). Thus, it negatively affects the welfare of the lecturers and staff, the maintenance of the infrastructure and other supporting aspects.

On the other hand, it will actually worsen the situation if the governance or management activities do not run smoothly. Thus, private universities must be innovative in utilizing the smallest possible opportunities that will become an advantage for the development of the institution, while preparing other necessities. Among various aspects, there is a consideration related to data. Data is a fact, or part of fact, that is described with symbols, pictures, values, or character descriptions that have meaning in a certain context (Dinanta, 2012). According to Munir and Wawan in (Halim, 2016), data can also represent an object.

In this era, the data is ideally stored digitally in the form of files, which has many advantages compared to data stored in hard copy (Fadli et al., 2023). Unfortunately, it requires a lot of money because the storage is a paid service. For the universities that have just been established and are still in the development phase, one of the solutions that utilize a free but safe platform. This platform is a service provided by Google, namely Google Workspace for Education (Sismanto et al., 2024). One of the private universities that utilizes this platform is Sekolah Tinggi Ilmu Tarbiyah Az Zahra Tasikmalaya. Since this university has just been established, all supporting aspects are still minimal. One of which is the service given to the students. Due to limited human resources and other resources, the services in the first years cannot be optimal. For example, if a student wants to issue an active letter on Saturday, the student must wait a few days because it can only be issued during working hours or it can also be done at the nearest effective lecture time if the administration department is busy. The service for the students cannot be given optimally. With the use of Google Workspace for Education, it is expected the problems can be solved.

RESEARCH METHODS

The research method used in this study was qualitative study with a descriptive approach, where the researcher tried to describe the use of Google Workspace for Education as the basis

of the governance system in Sekolah Tinggi Ilmu Tarbiyah Az-Zahra Tasikmalaya. The data were collected through: 1) observation, where the researcher directly observed student academic service given by administrative office; 2) interview, where the informants in this research were the leaders of the university, the head of Administrative and Academic Bureau; and 3) documentation study, which was done by looking for various services provided by Google Workspace for Education. Then, the data were analyzed with Miles and Huberman interactive model that consists of data condensation, data presentation dan conclusion drawing (Sugiyono, 2023). Meanwhile, the validity test was carried out through in-depth observation where the researcher collected data for a long time until data saturation and triangulation were achieved. The data from observations, interviews and documentation studies were processed and synchronized, since the data from all three were supporting each other.

RESULTS AND DISCUSSION

Google Workspace for Education

Google Workspace For Education is a service provided by Google for educational institutions to collaborate, simplifying instruction, and keeping the safety of the learning process (Google, 2024). This cloud service offers various digital education tools to develop digital competence of the users (Oliynyk dkk., 2024). The features in Google Workspace For Education among others are Google Classroom, Google Form, Google Sheet, Google Meet, Google Docs, Google Calendars, Google Drive, Jamboard, Google Slides, Google Photos, Dan Google Sites (Marlina, 2021). Besides, Google Workspace for Education also offers other services to fulfill the needs of the institution (Google, 2024); they are:

1. Google Workspace for Education Fundamentals, which provides various tools to assist teaching and learning process, such as Classroom, Google Meet, Google Document, Google Form, and Google Chat.
2. Google Workspace for Education Standard, which has similar features as Education Fundamentals but with more advanced security and administration control.
3. Teaching and Learning Upgrade, which adds some features such as advanced video conference, add-on Classroom and others.
4. Google Workspace for Education Plus, which includes all features in Education Standard and Teaching and Learning Upgrade with additional features for certain services such as detecting the attendance in Google Meet.

The Use of ‘Google Workspace for Education’ for Data Governance and Student Services in STIT Az Zahra Tasikmalaya

STIT Az Zahra Tasikmalaya is a new university that was established in 2021. The institution must adjust itself to the development of higher education in this digital era. It will give a professional impression to this new university, as well as become competitive and able to provide the best service for all parties, from students, lecturers, staff and so on.(Lanzon, 2022). Some efforts have been done such as developing good governance systems for data storage and student service. The data storage is either used as an archive or for the interest of students and lecturers (Sulaiman et al., 2021). For cost and time efficiency for its

development, STIT Az Zahra utilizes Google Workspace for Education in its data governance and service (Sharov et al., 2024). The presence of Google Workspace for Education provides many benefits for the development of the institution, including in supporting the continuous learning process (Hafid & Barnoto, 2022).

The services used in the institution are:

1. Data Storage

In storing the data of the institution, STIT Az Zahra Tasikmalaya uses Google Drive as the basis of data storage for all types of data. It is used since computer devices on campus are still limited so Google Drive is chosen as the solution.

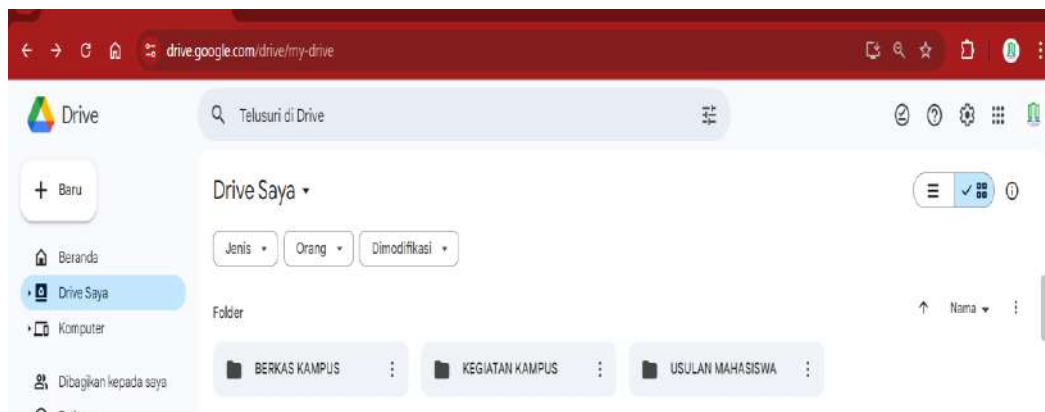


Figure 1. The display of Google Drive

The use of Google Drive for data storage allows and facilitates the campus to access the data anywhere, by using different devices and by using different Google accounts. It provides the features to change the role or access on the “share” option to make someone as editor, restrict the access to the data by clicking the “restricted access” option, and add someone's email address who later will be given permission to manage the drive. More details can be seen in the image below.

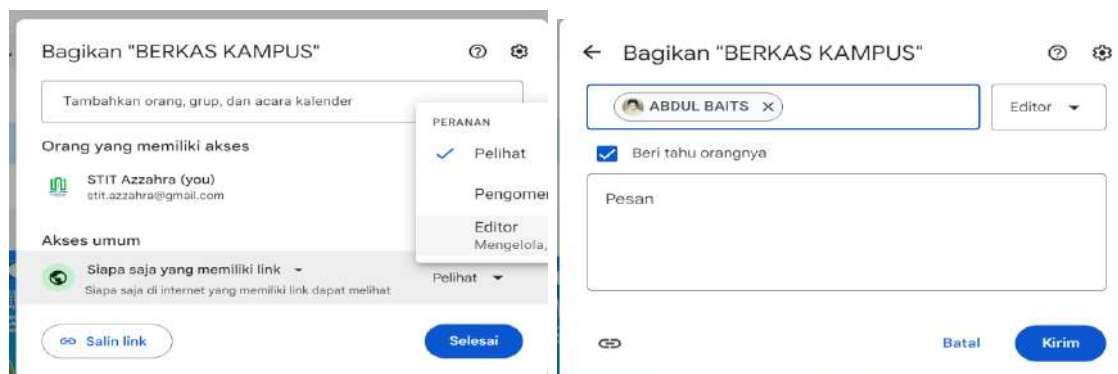


Figure 2. Modifying access in Google Drive

2. Attendance List for Non-Lectures Activities

The next features in Google Workspace for Education used in the institution are Google Form. With the aim to provide the best service for the students to save the proof of various

activities, STIT Az Zahra Tasikmalaya uses Google Form for the attendance list of the attendees. This feature has been proven effective and efficient to list the attendance in an event because many people can access it at the same time using their own devices. Due to many activities held by the institution, it is relatively effective for it can save the data automatically and in relatively small storage space. It is in contrast with a printed attendance list that needs more space to store it. As an example, below is the attendance list used in training of public speaking that used Google Form.



The image shows a Google Form interface. At the top, there is a header with two circular logos of men speaking into microphones. Between the logos, the text reads: "PELATIHAN PUBLIC SPEAKING Sekolah Tinggi Ilmu Tarbiyah Az Zahra". Below this, in smaller text, it says "Public Speaking For Prospective Teacher" and "Membangun Generasi Muda Yang Berakhlak dan IHSAN (Integrity, Humanity, Spiritual, Adaptable, Nasionalisme)". The main title of the form is "Pelatihan Public Speaking STIT Az Zahra Tasikmalaya". Below the title, there is a text input field with the placeholder "ISI NAMA EMAIL DENGAN BENAR". Underneath this field is a link "stt.azzahra@gmail.com" with the text "Santi akun" next to it. Below the link is a sharing status "Tidak dibagikan" with a lock icon. A red asterisk warning message says "* Menunjukkan pertanyaan yang wajib diisi". At the bottom, there is a label "NAMA *" with a red asterisk, and below it, the text "Jawaban Anda" is visible.

Figure 3. Attendance List by Using Google Form

3. Generating Certificates Automatically

Certificate is an essential for every event. It attracts participants to attend the event as well as become proof that the event has been carried out. However, from a financial perspective, a printed certificate is relatively expensive and needs a considerable amount of time to be issued. Here, Google Workspace for Education provides the solution to these problems.

In one feature in Google Form, the certificate can be generated automatically. It can be done by first uploading the design of the certificate to the drive. Then, it is changed into Google Slide format, and the Google Form is made to collect the data. The response from the Google Form will be manifested in the form of a Google Spreadsheet. In order to generate the certificate automatically, the autocrat add-on must be installed in the Google Spreadsheet. Autocrat add-on is shown in the figure below.

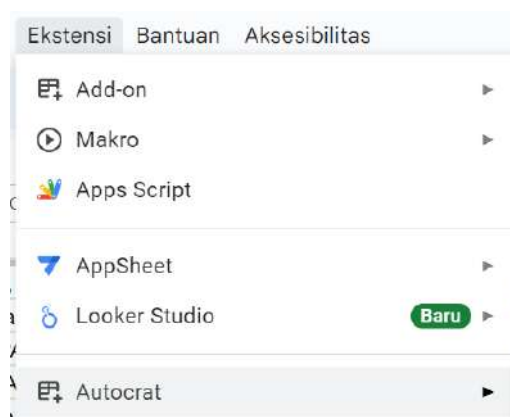


Figure 4. Autocrat Add-on

For effectiveness, the process of generating the certificate can be merged with the attendance list. Thus, when the attendees fill the attendance list, the data will be automatically used for a certificate that later will be sent to the email address written in the form. The process is shown in the following figure.

Timestamp	Email	Nama	Peran	Nomor	Merged Doc ID - e-Sertifikat
16/09/2023 10:58:18	abdulbaits96@gmail.com	Abdul Baits, M. Hum	PANITIA	NO : SRT.AEEv001/ST111uVaxsi12h1egA0VgnMy	https://docs.google.com/d/Sertifikat/Abdul Baits, M. Hum
16/09/2023 11:08:02	iwan.sopwandin.kampus@gmail.com	Iwan Sopwandin, M.Pd	PANITIA	NO : SRT.AEEv002/ST111Hqdymin1psQr_C8_Ls1l	https://drive.google.com/d/Sertifikat/Iwan Sopwandin, M.Pd
16/09/2023 11:41:27	restinapatimah13@gmail.com	RESTINA PATIMAH	PESERTA	NO : SRT.AEEv003/ST111K8X3NQTeYHuYP_1vel	https://drive.google.com/d/Sertifikat/RESTINA PATIMAH
16/09/2023 11:41:42	nengnida955@gmail.com	NENG NIDA FAUZIAH	PESERTA	NO : SRT.AEEv004/ST111z5qbl.Yyb0qNWS7mQf	https://drive.google.com/d/Sertifikat/NENG NIDA FAUZIAH
16/09/2023 11:42:00	isurardiana89@gmail.com	Isur Ardiana	PESERTA	NO : SRT.AEEv005/ST1119P7YIYRUBGLEqdAAIc	https://drive.google.com/d/Sertifikat/Isur Ardiana
16/09/2023 11:42:43	benar	Hidayatul ulum	PESERTA	NO : SRT.AEEv006/ST111Theo9VwUCXqz7J4Tqv	https://drive.google.com/d/Sertifikat/Hidayatul ulum
16/09/2023 11:44:03	reyhanagnas8@gmail.com	Sili Asiah Mulyati	PESERTA	NO : SRT.AEEv007/ST111-7ag1Xfqb7By3mNmK2	https://drive.google.com/d/Sertifikat/Sili Asiah Mulyati
16/09/2023 11:48:30	ftrapatr99@gmail.com	LISNA PITRIA PUTRI	PESERTA	NO : SRT.AEEv008/ST1113IU/NpVg16cM_1YKJsGI	https://drive.google.com/d/Sertifikat/LISNA PITRIA PUTRI
16/09/2023 11:49:33	snetin609@gmail.com	Entin sili nurjanah	PESERTA	NO : SRT.AEEv009/ST111j7jZ7qX-al6KiqDXZ7c	https://drive.google.com/d/Sertifikat/Entin sili nurjanah
16/09/2023 11:49:49	pipihariyani33@gmail.com	Pipih ariani	MC	NO : SRT.AEEv010/ST111SbcR_qH9W0JFD3hw9	https://drive.google.com/d/Sertifikat/Pipih ariani
16/09/2023 12:01:00	wawahwahyudin@gmail.com	WAWAH WAHYUDIN	PESERTA	NO : SRT.AEEv011/ST111S18N5SRHvJ91N34F3c	https://drive.google.com/d/Sertifikat/WAWAH WAHYUDIN
16/09/2023 12:10:36	taufikridwan2102@gmail.com	RIDWAN TAUFIK	PESERTA	NO : SRT.AEEv012/ST111E9KkbeRolyARawGXT	https://drive.google.com/d/Sertifikat/RIDWAN TAUFIK
16/09/2023 12:10:54	yulimelizzah412@gmail.com	Yuliani Imel Izzah	PESERTA	NO : SRT.AEEv013/ST111o2XX2qWp1d3xp_bqbl	https://drive.google.com/d/Sertifikat/Yuliani Imel Izzah
16/09/2023 12:11:04	ftrianisalma4@gmail.com	Salma Pitriani	PESERTA	NO : SRT.AEEv014/ST111HdJov-0fLuzMrdU-s51l	https://drive.google.com/d/Sertifikat/Salma Pitriani
16/09/2023 12:12:26	yansaputra0303@gmail.com	Rivan Saputra	PESERTA	NO : SRT.AEEv015/ST111WcWtrKenG84NthCWO	https://drive.google.com/d/Sertifikat/Rivan Saputra
16/09/2023 12:16:32	ilmaliminapih01012003@gmail.com	Ilma Ilmi Napih	PESERTA	NO : SRT.AEEv016/ST111Av4AeKJMlAxCI-QIP6	https://drive.google.com/d/Sertifikat/Ilma Ilmi Napih

Figure 5. Generating Certificate in Google Spreadsheet

4. Issuing Active Letter and Research Permits

Issuing active letters and research permits for the students are the services that are often needed by the students. This is needed to fulfill some requirements for scholarships or whose parents are civil servants or employees to get education allowance. On the other hand, a research permit is needed to finish students' undergraduate thesis. The letter is used as a covering letter to be given to institutions where the students do their research, as a proof that the research being done is legally under the supervision of the university. These letters are often needed urgently, even during holidays where the administration staff are not in their working hours. Thus, the services need longer time to be given to the students.

Based on these reasons, the campus provides a service for proposing the letters that can be accessed any time and later will be automatically sent via email address to the person. The method is first providing the template of the letter and then uploading it to Google Drive, so that it becomes a Google Document. After the template is ready, the next step is to prepare

the media for data collection through Google Forms, which responses are manifested in the form of Google Spreadsheet. Similar to the process of generating certificates, the Autocrat add-on is installed. Thus, the service can finally be accessed by the students.

5. Webinar

In this digital era, events held by the university are not only done offline but also online. Google Workspace for Education provides a feature named Google Meet that can be used for online events, one of which is webinar. A webinar that has been successfully held was Webinar of Research Methodology, that is shown below.

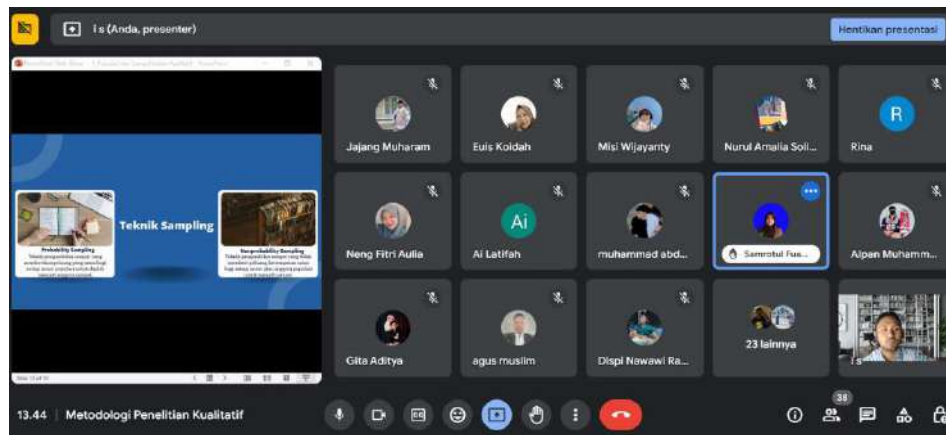


Figure 6. Webinar via *Google Meet*

6. Creating Webpage of Students Admission

After disseminating the information of student admission through printed brochures and social media, STIT Az Zahra Tasikmalaya also uses the feature of Google Workspace for Education named Google Sites. Even though this feature is free, the service given is professional. The webpage can be seen as follows.



Figure 7. Webpage of Student Admission using *Google Sites*

CONCLUSION AND SUGGESTIONS

Google Workspace for Education is one of the alternatives that can be used in for data governance in higher institution, especially institution that have just been established. It offers efficiency to adapt to the condition that are still minimal. It provides advantages because it

simplifies data governance activities without reducing the quality of service. Some of the Google Workspace for Education features used in data governance at STIT Az Zahra Tasikmalaya include Google Drive, Google Forms, Google Documents, Google Spreadsheets, Google Slides, Google Meet and Google Sites. Some activities that are facilitated by Google Workspace for Education include data storage, attendance lists, generating certificates, issuing students' active letter and research permits, webinar, and creating web pages of student admission. The use of Google Workspace for Education is very beneficial for the effectiveness of student services, because the administration process is no longer limited to face-to-face interaction and done working hours. The process can be done online, so that when the application form has been filled in, the letter will be automatically sent to the students' email. The impact of using Google Workspace for Education is not only felt by students, but also by the staffs, lecturers, and other parties in the university because effectiveness and efficiency in service can be given optimally. Furthermore, the future researchers who are interested in studying Google Workspace for Education can use questionnaire-based data collection techniques. The questionnaire can be given before and after the implementation of Google Workspace for Education, so that the result can be more credible.

REFERENCES

- Ardiansyah, D. (2022). TRANSFORMASI DIGITAL PERGURUAN TINGGI MENGGUNAKAN PRINSIP SMART EDUCATION. *FAHMA: Jurnal Informatika Komputer, Bisnis dan Manajemen*, 20(1), Article 1. <https://doi.org/10.61805/fahma.v20i1.43>
- Ardiansyah, Suharto, T., & Farid, A. S. (2022). Upaya Penanganan Uang Kuliah Tunggal (UKT) Bermasalah bagi Mahasiswa yang tidak Mampu pada Perguruan Tinggi. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 5(10), 4432–4441. <https://doi.org/10.54371/jiip.v5i10.1036>
- Dinanta, R. (2012). *LKP: Rancang Bangun Aplikasi Peminjaman dan Pengembalian Koleksi Buku Perpustakaan Pada SMA Negeri 1 Waru Sidoarjo* [Undergraduate, STIKOM Surabaya]. <https://repository.dinamika.ac.id/id/eprint/255/>
- Fad'li, G. A., Marsofiyati, M., & Suherdi, S. (2023). Implementasi Arsip Digital Untuk Penyimpanan Dokumen Digital. *Jurnal Manuhara: Pusat Penelitian Ilmu Manajemen Dan Bisnis*, 1(4), Article 4. <https://doi.org/10.61132/manuhara.v1i4.115>
- Google. (2024). *Ringkasan Google Workspace for Education—Bantuan Admin Google Workspace* [Bisnis]. <https://support.google.com/a/answer/7370133?hl=id>
- Hafid, H., & Barnoto, B. (2022). Manajemen Pembelajaran Kelas Digital Berbasis Google Workspace for Education. *Kharisma: Jurnal Administrasi dan Manajemen Pendidikan*, 1(1), 48–58. <https://doi.org/10.59373/kharisma.v1i1.5>
- Halim, R. N. (2016). Rancang Bangun Sistem Pengolahan Data Peserta Diklat di Lp3sdm Azra Palembang. *Jurnal Ilmiah Matrik*, 18(3), 261–270.
- Lanzon, R. C. (2022). Frequency Level and Problems encountered by the IBED Faculty in Utilizing the Google Workspace for Education. *JPAIR Institutional Research*, 18(1), 47–62. <https://doi.org/10.7719/irj.v18i1.827>
- Marlina, B. (2021, Desember 26). PEMANFAATAN GOOGLE WORKSPACE FOR EDUCATION PADA PEMBELAJARAN DARING. *PROSIDING SEMINAR NASIONAL PROGRAM PASCASARJANA UNIVERSITAS PGRI PALEMBANG*. Seminar Nasional Pendidikan, Palembang. <https://jurnal.univpgri-palembang.ac.id/index.php/Prosidingpps/article/view/6903>
- Mutmainah, M., Gumanti, M., Desastra, Y. Z., & Novitasari, E. (2024). Analisis Kualitas Layanan Akademik Terhadap Kepuasan Mahasiswa Di Sekolah Tinggi Ekonomi Syariah Tunas Palapa. *eCo-Fin*, 6(1), 95–101. <https://doi.org/10.32877/ef.v6i1.1158>

- Oliynyk, V. V., Gushchyna, N. I., Kondratova, L. H., & Kasian, S. P. (2024). Developing digital competence of teachers in postgraduate education using Google Workspace for Education. *CTE Workshop Proceedings, 11*, 356–380. <https://doi.org/10.55056/cte.662>
- PD Dikti. (2024). *Pangkalan Data Pendidikan Tinggi* [Pendidikan]. pddikti.kemdikbud.go.id. <https://pddikti.kemdikbud.go.id/perguruan-tinggi>
- Putri, N. T., Satria, B., Amrina, E., & Alfadhlani, A. (2021). Pengaruh Kualitas layanan Terhadap Kepuasan Mahasiswa dengan Moderasi Budaya Organisasi dan Reputasi. *Jurnal Rekayasa Sistem Industri, 10*(2), 121–130. <https://doi.org/10.26593/jrsi.v10i2.4200.121-130>
- Sharov, S., Tereshchuk, S., Filatova, O., Hinkevych, O., & Ksendzenko, O. (2024). Survey Analysis of University Teachers in Ukraine Regarding the Use of Google Workspace for Education. *TEM Journal, 13*(1), Article 1. <https://doi.org/10.18421/TEM131-33>
- Sismanto, U., Cikusin, Y., & Mistar, J. (2024). Challenges and Strategies in Adopting Google Workspace for Education: Perspectives from Educational Leaders in Indonesia. *Asian Journal of Education and Social Studies, 50*(4), Article 4. <https://doi.org/10.9734/ajess/2024/v50i41328>
- Sugiyono. (2023). *Metode Penelitian Pendidikan (Kuantitatif, Kualitatif, Kombinasi, R&D dan Penelitian Tindakan)* (3 ed.). Alfabeta.
- Sulaiman, M. A., Fahmi, A. R., & Falah, F. (2021). *IMPLEMENTASI SISTEM INFORMASI MANAJEMEN AKADEMIK BERBASIS TEKNOLOGI INFORMASI SEBAGAI UPAYA MENINGKATKAN MUTU PELAYANAN PEMBELAJARAN DI SMK AL-ISLAH KEBAGUSAN. 2.*
- Zulfikar, F. (2024). *10 Negara dengan Jumlah Kampus Terbanyak di Dunia, Indonesia Nomor Berapa?* [News]. [detikedu](https://www.detik.com/edu/detikpedia/d-7222579/10-negara-dengan-jumlah-kampus-terbanyak-di-dunia-indonesia-nomor-berapa). <https://www.detik.com/edu/detikpedia/d-7222579/10-negara-dengan-jumlah-kampus-terbanyak-di-dunia-indonesia-nomor-berapa>