

**Implementation of SIAGUS in The Online Presence Of Junior High School Teachers in The City of Surabaya**  
**Implementasi SIAGUS dalam Presensi Online Guru SMP di Kota Surabaya**



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ARTICLE INFORMATION	
<p><b>Keywords</b>                      Human Resource;                      Implementation;                      Teacher;                      SIAGUS</p>	<p><b>ABSTRACT</b>                      This research aims to determine the implementation of the Surabaya teacher application information system in the online presence of junior high school teachers in the city of Surabaya. The SIAGUS application is the object of research because it is the only application to support teacher activities specifically in the city of Surabaya. This research methodology is descriptive qualitative with observation, interviews accompanied by documentation studies as a way to obtain data. The data was analyzed using the Rippley and Franklin theory quoted in (Yulianto Kadji, 2015) with the achievement of 3 sufficient indicators including the level of bureaucratic compliance, smooth routine and no problems and performance. The research results show that the SIAGUS application is here to make it easier for teachers to attend online, teachers feel helped and the level of teacher discipline after the application has clearly increased. even though there are obstacles such as the network on the application user's device and the resources of teachers who are classified as elderly. However, in this way the Surabaya City Education Office as teacher monitoring can resolve this problem</p>
<p><b>Kata Kunci</b>                      Guru;                      Implementasi;                      SIAGUS;                      Sumber Daya Manusia</p>	<p><b>ABSTRAK</b>                      Penelitian ini bertujuan untuk mengetahui implementasi sistem informasi aplikasi guru Surabaya dalam presensi online guru SMP di Kota Surabaya. Aplikasi SIAGUS menjadi objek penelitian karena aplikasi tersebut satu-satunya aplikasi dalam penunjang kegiatan guru yang khusus ada di Kota Surabaya. Metodologi penelitian ini adalah kualitatif deskriptif dengan observasi, wawancara disertai studi dokumentasi sebagai cara mendapatkan data. Data dianalisis menggunakan teori Rippley dan Franklin yang dikutip dalam (Yulianto Kadji, 2015) dengan capaian 3 indikator yang mencukupi diantaranya Tingkat kepatuhan birokrasi, Kelancaran rutinitas dan tiada masalah dan Kinerja. Hasil penelitian menunjukkan bahwa aplikasi SIAGUS hadir untuk memudahkan guru dalam hal presensi online, guru merasa terbantu dan tingkat kedisiplinan guru sesudah adanya aplikasi tersebut jelas meningkat. kendati terdapat kendala seperti jaringan pada perangkat pengguna aplikasi dan sumber daya guru yang tergolong lansia. Tetapi dengan demikian Dinas Pendidikan Kota Surabaya sebagai pemonitoring guru dapat menyelesaikan persoalan tersebut.</p>
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## Introduction

The current era of globalization has made the development of information technology develop very rapidly, this has made many human jobs replaced by computerized systems (Binz & Truffer, 2017; Li et al., 2014; Mukhsin, 2020; Zain et al., 2021). Technology has a significant influence on human life and the progress of society, so there is an understanding of knowledge and technology as a phenomenon in society (Ngafifi, 2014; Rymarczyk, 2020; Setiawan, 2018). Over time, the development of science and technology will progressively provide support for innovation and the creation of new technologies (Habibah, 2017; Schot & Steinmueller, 2018; Tekege, 2017). Science and technology are closely related, because without science technology will be less effective and efficient (Junaedi, 2019). With the development of science and information technology, there is a transformation in the way people think and live in their daily lives (Ilomäki et al., 2016; Yuni et al., 2016).

The development of increasingly sophisticated technology must certainly be balanced with qualified human resources (Anderson & Rivera-Vargas, 2020; Julius & Nagel, 2020). This is in line with the opinion of (Sulistiyani & Rosidah, 2009) which says that HRM is an implementation or practice of general management functions in the form of human resource management activities which are employees. Improving the quality of human resources is an absolute prerequisite for achieving development goals. One of them to improve the quality of human resources is education, so that the quality of education must always be raised as a determining factor for success, so the quality of human resources is raised through various educational programs that are implemented systematically and directed based on interests that refer to advances in science and technology (Salahuddin et al., 2018; Sawaluddin & Rustandi, 2020). With the development of existing technology and information, it is hoped that the world of education will run in accordance with existing developments (Ambarwati et al., 2021; Salsabila et al., 2020; Surani, 2019). In the world of education, the attendance process is the most important process (Mantra et al., 2022; Sunarni & Kryono, 2023). Not only students, teachers are also required to take attendance to determine the quality of their work as teachers at school (Gershenson, 2016; Liu & Loeb, 2021; Nurdiana & Zarkasi, 2017).

Improving the quality of human resources is a prerequisite that cannot be ignored in efforts to achieve development goals (Diana, 2015; Hák et al., 2016; Nuraeni, 2022). One of the essential ways to improve the quality of human resources is through education (Bahri, 2022; Cikka, 2020; S et al., 2015). Therefore, it is important to make the quality of education a determining factor of success. Efforts to improve the quality of human resources can be realized through various educational programs that are implemented systematically and purposefully, which aim to keep up with advances in science and technology (Abidi, 2021; Dewi, 2017; Hambali, 2021). With the advancement of technology and information, the hope is that the world of education can keep up with these developments. The attendance process is a very crucial aspect. Attendance is not only the responsibility of students, but also an obligation for teachers. The presence of teachers in the attendance process not only reflects the quality of their work as teachers in schools, but also contributes to the overall success and quality of learning (Nurdiana & Zarkasi, 2017; Putri et al., 2023).

Educational institutions need to develop management information systems to face global competition. The main goal is to provide information quickly, accurately, and easily to improve service quality (Loryana & Haq, 2021; Musdalifah et al., 2019; Patriansyah et al., 2023). Management Information Systems are intended to provide services to the public or public service sector (Haq et al., 2021; Speklé & Verbeeten, 2014; Yudha Pratama, 2016). It is a system, either consisting of humans or machines that store information that supports management activities and plays a role in the company's decision-making process. The use of digital applications to record teacher attendance can significantly improve efficiency and discipline. The attendance recapitulation process, which currently still relies on manual books, can be improved through digital technology, reducing the risk of data loss or damage, preventing entry errors, and making it easier to search and manage attendance data. The Surabaya City Government has implemented many innovations in terms of e-government, one of which is online attendance for kindergarten, elementary, junior high school teachers, both public and private in Surabaya City. Surabaya City is the first city to have the largest number of public and private junior high school teachers, totaling 5,811 teachers.



**Figure 1. SIAGUS application**

Surabaya Teacher Application Information System (SIAGUS) is an innovative application launched and managed by the Surabaya City Education Office (DISPENDIK), inaugurated in 2017 during the Tri Rismaharini administration. Surabaya Teacher Application Information System, hereinafter abbreviated as (SIAGUS), is a system for delivering data and information in a single and synchronous manner and making decisions according to the duties and functions of each teacher in terms of online attendance in Surabaya City. SIAGUS is an online-based teacher service system with the Surabaya City Education Office with the aim of simplifying the duties and functions of teachers in carrying out their work (Mansyuri et al., 2021). This application system is easier because teachers can take attendance online and take care of allowances and other files more easily and efficiently. There are several administrative features in the SIAGUS application, including: attendance, documents, CAKEP, SKP, promotion, teacher permits, performance allowances, activity journals, specimens, and history.

Not only solving problems related to teacher administrative tasks, SIAGUS is also a forum for processing teachers in Surabaya City. The SIAGUS application can be downloaded on the play store and can be used by teachers and educators at the kindergarten, elementary and junior high school levels who work in public and private schools that have been registered in accordance with applicable regulations. With Government to Employee (G-to-E), the Surabaya City Education Office can easily monitor teacher activities with this SIAGUS program. This application also provides convenience for teachers in Surabaya City, because they feel helped and very effective and do not need to report manually to the office. Surabaya City itself has a very large number of teachers so it requires a clear program policy that leads to where. With this SIAGUS application, the level of teacher discipline is increasing because teachers are more required to come before the time specified to make a presence in the SIAGUS application, besides that the head of the office is also easier to monitor teacher attendance in every school in Surabaya City.

The e-Government application has successfully connected the Surabaya City Education Office with teachers in the Government to Employee (G-to-E) category. This e-Government concept not only aims to improve the quality of human resources, but also aims to improve the performance and welfare of employees (Aritonang, 2017; Oktavya, 2015; Yang & Rho, 2007). The implementation of the Government to Employee (G-to-E) model, as explained by Indrayani (2020), includes career development of government employees with a focus on improving mutations, rotations, demotions, and promotions for all government employees.

In addition, e-Government also acts as a support for the mutation and rotation management process, providing effective support in improving the quality of human resources in the education sector (Idrus & Idrus, 2023; Rahadian, 2019). The system also includes aspects of health and education insurance to provide better protection to government employees. Thus, the implementation of e-Government at the Surabaya City Education Office not only brings administrative efficiency, but also contributes positively to career development and employee welfare.

With Government to Employee (G-to-E), the Surabaya City Education Office can easily monitor teacher activities with this SIAGUS program. This application also provides convenience for teachers in Surabaya City, because they feel helped and are very effective and do not need to report manually to the office. Surabaya City itself has a very large number of teachers so it requires a clear program policy that leads to where. With this SIAGUS application, the level of teacher discipline is increasing because teachers are more required to come before the time specified to make a presence in the SIAGUS application, besides that the head of the department is also easier to monitor teacher attendance in every school in Surabaya City.

However, various efforts regarding the renewal of teacher attendance, which used to use signatures and fingerprints, have now changed by using the SIAGUS application or selfie photos. SIAGUS can be accessed with a maximum photo distance of 20 meters from the coordinate point determined by the school. If the teacher takes attendance outside the distance set by the school, the attendance will turn red which will be considered absent by the relevant agencies. This will serve as a warning to the teacher.

In addition, the SIAGUS application often experiences interruptions in its use. As when the attendance is carried out, the teacher conducts a photo session for attendance with a device that has been registered in the SIAGUS application. However, taking photos for attendance often experiences interference (gateway). This is a problem because it is counted as absent if the device used has a problem in presenting. Then the distance from some teachers' homes to school is also too far so that the opportunity to arrive late is even greater and often occurs.

The author conducts this research because he sees conditions in the field related to the implementation of the Surabaya Mayor's Regulation regarding the use of technology to support the needs of the apparatus is still not well implemented, there are still many obstacles that must be considered by the city government in preparing human resources that can accept existing technological developments, so this research is intended so that later it can provide useful output for both the author, and related agencies. Based on the background and description of the data above, the problem formulation that will be discussed in this study can be drawn, namely how is the implementation of the SIAGUS application in the online presence of junior high school teachers in Surabaya City? and this study aims to find out, analyze and describe the implementation of the SIAGUS application in the online presence of junior high school teachers in Surabaya City.

## **Method**

Determination of informants in this study using purposive sampling technique. This purposive sampling technique is a technique of taking informants or sources with a specific purpose in accordance with the research theme because the person is considered to have the information needed for research. Data mining in the field was carried out by interviewing five key informants, and several supporting sources. Then from the results of these interviews the researcher can conclude what and how and what kind of solution in solving the problems in the study.

This research uses a qualitative approach with descriptive procedures as its research method. according to (Sugiyono, 2019) qualitative research methods are usually called natural methods, because in their course they are carried out in natural conditions. The research approach applied is a descriptive approach. Qualitative descriptive research aims to investigate the status of an object or group of people with the intention of creating a systematic, factual, and accurate description, description, or painting of the phenomenon or action being studied. Factors such as conditions or relationships, ongoing processes, effects, and effectiveness are examples of things described in descriptive research. The purpose of researchers using this descriptive approach is to collect data about the implementation of the SIAGUS application information system in the online presence of junior high school teachers in the city of Surabaya.

A description of the role of the research will contribute to a description of the issues that may arise in data collection techniques. Data collection steps include limiting the research, collecting information through observation, interviews, and documentation (Creswell, 2016). Researchers used data analysis from (Miles & Huberman, 1984) which describes data validity into four parts, namely data reduction, data presentation, conclusion drawing / verification, and used data validity according to (Sugiyono, 2019) which includes credibility testing with indicators of extended observation, triangulation and using reference materials.

In observation activities according to John W Creswell, researchers go directly to the field to observe the behavior and activities of individuals at the research location. In this observation, the researcher records or records either from a structured, or semi-structured way. As by asking a number of questions related to the implementation of the Surabaya Teacher Application System (SIAGUS).

In interviews, researchers may conduct face-to-face interviews with participants, interview them by telephone, or engage in group interviews. Such interviews require generally unstructured and open-ended questions designed to elicit the views and opinions of the participants (Creswell, 2016). The reason for choosing this interview technique is to explore

more in-depth information about the research topic that has been determined, as stated in the theory of program implementation from Rippley and Franklin which contains three indicators.

During the research process, researchers may collect qualitative documents. The documents can be public documents, such as newspapers, papers, office reports, or private documents such as diaries, letters and emails (Creswell, 2016). In this case, researchers collected documents or letters and reports from the Surabaya City Education Office.

## **Results and Discussion**

SIAGUS (Surabaya Teacher Application Information System) is an innovative application introduced and managed by the Surabaya City Education Office in 2017, under the leadership of Tri Rismaharini. The application is designed to simplify teacher administration and improve efficiency in managing attendance and other administrative tasks. Prior to the SIAGUS application, the teacher administration process was done manually, causing violation rates to increase and monitoring to be less effective. However, with SIAGUS, the administration process becomes more coordinated, allowing teachers to focus on their teaching duties.

The SIAGUS application provides administrative features such as attendance, documents, CAKEP, SKP, promotion, teacher permits, performance allowances, activity journals, specimens, and history. This helps in the management of teachers' attendance and eases their administrative processes. In addition, this application can be downloaded through the Play Store and used by teachers and educators at the kindergarten, elementary, and junior high school levels in both registered public and private schools. The implementation of e-Government with the concept of Government to Employee (G-to-E) has successfully improved the performance and welfare of the Surabaya City Education Office employees. Through SIAGUS, the Education Office can easily monitor teachers' activities and provide convenience for them. However, this application experiences some obstacles, such as interruptions in its use and long travel distances for some teachers.

In terms of absenteeism, there are sanctions for teachers who violate the attendance rules, including salary deductions for PNS and GTT teachers. Teachers who are often late or absent without valid information may be subject to sanctions in the form of salary deductions according to applicable regulations. Teacher absenteeism is a problem that needs to be managed properly, and SIAGUS assists in monitoring teacher attendance and management more efficiently. In measuring the success of program implementation such as SIAGUS, according to Rippley and Franklin cited by Yulianto Kadji (2015), the definition of successful



program policy implementation is viewed from three factors: a compliance perspective that measures the implementation of the compliance of the implementing apparatus, successful implementation is measured by the smoothness of the routine and the absence of problems, and successful implementation leads to performance that satisfies all parties, especially the program beneficiary group. Therefore, the success of SIAGUS should be evaluated based on these factors to ensure its effectiveness in meeting its original objectives, which are to ease the administration of teachers and improve their performance and welfare.

#### **A. Bureaucracy Compliance Level**

Public policy implementers are expected to have attitudes and mentalities that are reflected in actions that adhere to and comply with the principles in the implementation of each public policy. The things that influence these actions are clarity regarding the discipline of teachers in carrying out their duties and obligations and the risks received if the level of discipline cannot be achieved. The following are the research results of the two sub-indicators.

##### **1. Clarity regarding teacher discipline in carrying out duties and obligations**

Educators are expected to show discipline in carrying out their professional responsibilities, including in terms of recording attendance. In this case, the SIAGUS application makes it easy for teachers to carry out their duties and obligations as stated by Mrs. Sri Wulandari, as the Head of the qualification planning section, teacher competencies and education personnel: "...This siagus application provides convenience for each individual teacher who uses it. Teachers who used to take attendance manually using paper, are now required to advance in terms of information technology, therefore SIAGUS was created as one of the applications that has many features, especially online attendance." (Results from interview January 23, 2024) Agreeing with the above statement, Mrs. Eka, a teacher representative of SMP Negeri Surabaya added: "...Before the SIAGUS application, the online attendance process was done manually, which made it easy for teachers to manipulate attendance, so that supervisors from the office were also not easy to monitor teachers." (Result of interview February 5, 2024) The use of the SIAGUS application not only makes it easier for teachers to carry out their duties and obligations as teachers, but also makes it easier for the Surabaya City Education Office to monitor educators. In this case, teachers can be directly monitored by the Surabaya City Education Office. Teachers can also take attendance by taking photos of the top, front, right, left, and back when doing the initial

registration, then the attendance process is carried out by taking facial photos. This was conveyed by Mrs. Rahayu as a representative of State Junior High School Teachers in Surabaya City "... when doing attendance, the teacher is only allowed to use one device to be able to do the next attendance process. When registering for the first time, the teacher must do five photo sessions, namely front, back, top, bottom, side photos, then later wait for verification from the Surabaya City Education Office. That's why if the teacher whose house is close by, if his cellphone is left behind, he even tries to go home to get the cellphone, because later if the attendance process is late, it will be counted as absent and will get sanctions." (Results from interviews February 5, 2024) Thus from the description of the results above, it is known that by using the SIAGUS application, the online attendance process for educators from public and private junior high schools in Surabaya City is easier and more flexible, besides that teachers no longer use a lot of paper or fingers to do attendance, then also the task of monitoring from the Surabaya City Education Office will be more effective. Meanwhile, with the SIAGUS application, hundreds of junior high schools both public and private can be controlled easily.

## **2. The obligations and risks involved if that level of discipline is not achieved**

If technology has been applied, it is expected that the human resources of teachers will be even better, but there is a delay behavior carried out by each individual teacher himself in conducting online attendance. Educators from public or private junior high schools in Surabaya City have certainly experienced delays in inputting online attendance. These teachers used to be before the SIAGUS application received sanctions in the form of warnings and guidance which were carried out by the school where the teacher taught, this applies to both ASN and Non-ASN teachers. This is as stated by Mrs. Agustin Suswati as a representative of State Teachers in Surabaya City, who said: "... For sanctions given before SIAGUS was in the form of reprimands, coaching and warnings. This was done by the relevant school principal to teachers who were late. But after the SIAGUS application, the sanctions are more about cutting performance allowances for civil servant teachers, and cutting salaries for non-civil servant teachers. Teachers are said to be late if the presence in the SIAGUS application turns red, and goes out of the coordinate point determined by the school, if it goes out of that point, the teacher cannot input the presence at that time and can be said to be

late or absent." (Results from interview February 5, 2024) In line with the above statement, Mrs. Sri Wulandari, as the Head of the Planning Section for Qualifications, Teacher Competencies and Education Personnel of the Surabaya City Education Office said: "...Yes, actually, if the teachers are late in inputting attendance in the SIAGUS application, they will definitely receive sanctions and reprimands in the form of a two percent cut in performance allowance for civil servant teachers, while for Non ASN or GTT teachers, they get a two percent cut, but the cut is deducted through their salary, not through performance allowances like ASN teachers." (In accordance with the opinion expressed by Ms. Sri Wulandari, Mr. Dedi Prasetiawan, as Head of the Teacher and Education Personnel Supervision Section, said that: "...It is true that teachers who are late in making attendance will get sanctions in the form of deductions from allowances for ASN teachers, and salary deductions for Non ASN teachers. For the tardiness itself, the maximum can only be done for six times in one year, if more than six times will be summoned by the principal and will be given guidance." (Result of interview on February 12, 2024) However, this condition is different from the provisions of private junior high schools in Surabaya City, which makes a difference if in private junior high schools there is no punishment for teachers who are late, private junior high school teachers only get a warning in the form of a warning by the principal and there is no salary deduction caused by their tardiness. This is as stated by Mrs. Saropah as the Principal of one of the Private Junior High Schools in Surabaya City, who said that; "...It is clearly different, SIAGUS in our school is not like SIAGUS applied in public junior high schools. In our school, if the teacher is late, they are only warned, there is no need for punishment in the form of salary deductions. Because the teachers in our school only get a salary, that is what makes SIAGUS in public and private junior high schools different in terms of its operation." (Result of interview February 19, 2024) In line with the above statement, Mrs. Nurma Pradaningtyas, as a representative of the Private Junior High School teachers said that: "...For how to operate the SIAGUS application in public and private schools is clearly different, in our school, SIAGUS does not really affect teacher performance. The way to do the attendance is also different. If in public schools, after uploading photos and locations cannot be changed. Now for private schools, only taking a photo for abscessni does not need a location and that can also be changed deck. (Results from interview February 19, 2024) Thus, from the description above that technological advances in the field of education can not only help the work of teachers, but there are also sanctions obtained

by teachers if they are late in making online attendance, such as in the form of performance allowance deductions for teachers who are classified as civil servants and salary deductions for non-civil servant teachers. The sanction is given if the teacher is late in making a presence in the SIAGUS application, then if the teacher arrives late for any reason and for teachers who make a presence outside the coordinate distance set by the school. The existence of the SIAGUS application has a significant impact on teacher resources, because teachers will be more disciplined than before implementing the SIAGUS application.

## **B. Smooth Routine and No Problems**

Public policy implementers make every effort to overcome any challenges that arise during the public policy implementation process. Each implementer acts as a problem solver, not as an additional cause of problems. The things that influence this are infrastructure facilities in ensuring the smooth running of the SIAGUS application and clarity regarding the existence of an obstacle in the SIAGUS application implementation process. The following are the research results of the two sub-indicators.

### **1. Infrastructure to ensure the smooth running of the SIAGUS application,**

In addition to the human resources of teachers who are a determining factor in the successful implementation of the SIAGUS application, infrastructure and facility factors also have an important role in supporting the success of SIAGUS implementation. The SIAGUS application must be optimized so that it can provide benefits for its users. As stated by Mr. Imas Dwikatama, S.Kom, as the Information Technology Manager of the Surabaya City Education Office: "...To support the process of using the SIAGUS application from schools in Surabaya, we have seven computer facilities, each computer has its own admin, such as the computer that I use together with my six colleagues which is used to monitor teachers in the SIAGUS application, these teachers are monitored on these seven devices, such as how often they are late, how often they are absent. This is to be based on what sanctions are suitable for the offending teacher." (Result of interview February 12, 2024) This was also confirmed by Mr. Dedi Prasetiawan, as Head of the Teacher and Education Personnel Supervision Section, saying that: "...Each school is also appointed by the Education Office to become an operator regarding the SIAGUS application, each school with SIAGUS application users has one operator assigned to handle problems in the SIAGUS

application, but if it cannot be resolved, the school will report to the education office for further follow-up." (Result of interview on February 12, 2024) The same thing was also conveyed by Ms. Sri Wulandari, as the Head of the qualification planning section, teacher competence and education personnel: "... We always provide supporting facilities for the smooth implementation of the siagus application, such as for example making improvements to the website system which includes maintenance of hardware and software systems." (Results from interview February 12, 2024) This was added by Mr. Imas Dwikatama, S.Kom, as the Information Technology Manager of the Surabaya City Education Office: "...Our team always carries out system maintenance to provide the smooth running of the SIAGUS application system, besides that we also routinely carry out periodic maintenance in order to keep the application system functioning properly and as it should." Therefore, from the description above, supporting facilities are no less important than human resources. As a means that must be present in the process of supporting the smooth running of the application, every existing facility must be guaranteed the availability of quality and the system must always be in good condition, system maintenance and system maintenance must also be carried out frequently because in order to maintain the stability of application use, considering that SIAGUS application users are not only from one school, but from hundreds of schools in Surabaya City.

## **2. Clarity regarding the existence of an obstacle that exists in the process of implementing the SIAGUS application**

The implementation process is not only related to how to do and implement the application, but also how the obstacles that occur from the implementation process occur. In addition, not all parameters of the smooth implementation of the routine have been met according to expectations, there are still many obstacles that exist. This was explained by Mrs. Eka Sari, as a representative of public junior high school teachers in Surabaya City: "...Maybe the obstacles that we often experience are from the signal, sometimes the teachers are too rushed to go to work and don't check the inter quota first, then the cellphones used are still slow, so the time to do the presence on the cellphone is delayed." (Interview result February 5, 2024) In contrast to the opinion of Mrs. Eka, Mrs. Saropah as the Principal of one of the Private Junior High Schools in Surabaya City said that: "...In our school, if the teacher is late to make an online

presence in the SIAGUS application, the teacher uses the geotek application, which in this geotek application can be set for the location, so that the teacher can take attendance whenever waiting for SIAGUS. Signal difficulties in our area are also not a big problem. Alhamdulillah, the devices in our school support various levels of signal, it's just that if the lights or electricity go out, online attendance is replaced with manual attendance, which is in the form of handwriting on paper." (Result of interview February 19, 2024) Likewise with what was conveyed by Mr. Imas Dwikatama, S.Kom, as the Information Technology Manager of the Surabaya City Education Office "... From us as SIAGUS operators, we realize that the operators at the Education Office are still lacking, with hundreds of schools using the SIAGUS application with only seven operators, so maybe the quantity of information operators is still lacking." (Result of interview February 12, 2024) Mr. Dedi Prasetiawan, as Head of the Teacher and Education Personnel Supervision Section, added that: "...For the teachers themselves, we find several obstacles apart from the provider signal and the device of the teacher itself, for example from the resources of teachers who are entering the elderly and approaching retirement, from there the teacher himself still does not have sufficient knowledge to operate an application, besides that his knowledge is also still very lay, so for teachers who are classified as elderly, in my opinion, they must be equipped with more knowledge and technology so that in their use there are no mistakes by providing assistance and guidance for them." (From the description above, it can be seen that the inhibiting factors that can interfere with the smooth process of the SIAGUS application still often occur, for example from the signal or cellphone of the SIAGUS application users, then regarding the lack of operators in the Education Office to reach all schools using the SIAGUS application in Surabaya City, and there are still elderly teachers who have difficulty using the SIAGUS application so that they need assistance so that in carrying out the licensing process there are no mistakes.

### **C. Performance**

The success of policy implementation depends on how effective the policy implementation itself is. The effectiveness of policy implementation will result in the optimization of policy performance, but the performance of individuals and public policy implementers also has an important role in determining the effectiveness and optimization. This refers to clarity regarding the level of performance of bureaucratic employees as program implementers and

the impact of the resulting performance in using the SIAGUS application. The following are the research results of the two sub-indicators.

**1. Clarity regarding the level of performance of bureaucratic employees as program implementers**

In a program implementation, what is seen to make the program successful is the performance of the organization or bureaucracy, in this case the performance of teachers in using the SIAGUS application, whether it can be helped by the application or maybe teachers find it more difficult in terms of using technology. As what was conveyed by Mrs. Agustin Suswati, as a representative of Surabaya State Junior High School teachers: "... Oh yes, for us teachers, of course, it is very helpful with the SIAGUS application, because this application, because the use of this teacher application information system greatly increases work productivity, especially in terms of attendance, the attendance process is also very effective and efficient, does not require a long time, it's just that teachers are required to remember the time limit for online attendance input in the SIAGUS application. This needs to be considered because so as not to be late in the online attendance process. The teachers also with the SIAGUS application are more productive in their work so that it reduces the workload for me and other teacher friends." (Result of interview February 5, 2024) It cannot be denied that the presence of this SIAGUS application makes teachers more easily assisted with their work, then they are also very much helped because they no longer need to take attendance which requires attendance inside the school, teachers can take attendance outside the school but still with a distance of coordinate points decided together by the school. This is in line with the views expressed by Ms. Sri Wulandari, as the Head of the planning section for qualifications, teacher competencies and education personnel: "...We as monitors of teachers' duties also find it very helpful because of the SIAGUS application, we can control the teachers easily through the operators we have. Teachers can easily be connected to their complete attendance data, and we have it all, so that when sanctioned for lateness the teacher cannot avoid it. Then in terms of operational costs, maybe this SIAGUS application is more expensive than before using the SIAGUS application because the system maintenance costs are also very expensive, using funds from the Surabaya City APBD." (Result of interview February 12, 2024) The same thing was also conveyed by Mr. Imas Dwikatama, S.Kom, as the Information Technology Manager of the Surabaya City Education

Office: "... The cost of maintaining the operational system of the SIAGUS application also requires a lot of money, so maybe if you use paper or finger like before it is not as high as the budget now, but it all goes back to the functions and benefits received by the teacher and us as monitoring." (Interview results February 12, 2024) With the description above, the SIAGUS application is present in order to make it easier for teachers to do online attendance, not only teachers are made easy by the SIAGUS application, but the Education Office is also benefited by this application, because the office itself will be younger in the process of monitoring and evaluating teacher performance. So that all parties here feel the benefits of this SIAGUS application and create their own effectiveness and efficiency for teachers using the SIAGUS application in Surabaya City and the Surabaya City Education Office.

## **2. The impact of the performance generated in the use of the SIAGUS application**

From the existing impacts, what results in the use of this SIAGUS application is the implementation of the Surabaya Mayor Regulation Number 5 of 2013 concerning Guidelines for Information and Communication Technology, as well as the creation of human resources and high discipline so that teachers will further minimize any existing violations. This was conveyed by Mr. Dedi Prasetiawan as Head of the Teacher and Education Personnel Supervision Section, adding that: "... With the existence of SIAGUS, it can certainly foster a sense of responsibility and discipline of these teachers so that in the teaching and learning process, teachers can do it optimally." (Results from interview February 12, 2024) The same thing was also conveyed by Sri Wulandari, as the Head of the qualification planning section, teacher competencies and education personnel: "It is clearly different, before the SIAGUS application, the level of teacher discipline was very low, many teachers still like to violate, so in the past if you say the resources were still lacking, now you can see that with the SIAGUS application, teachers think twice more if they commit a violation because everything will be detected and connected to all of our operators, it is also our effort to create disciplined teacher resources and be responsible for the duties they carry." (Result of interview February 12, 2024) This is confirmed by a statement from Mrs. Rahayu as a representative of public junior high school teachers in Surabaya City that: "...Discipline and responsibility are very important things to be able to show when carrying out duties and obligations, especially since we are a teacher, so to be able to model good behavior to our students we must comply with the rules and regulations that apply." (Results



from interview February 5, 2024) Mrs. Nurma as a representative of private teachers in Surabaya City also said that: 91 "...Although the SIAGUS application does not really affect our school, discipline is still the personal responsibility of each. Not only from our school, all private schools in Surabaya City must also emphasize the attitude of discipline both from teachers and students." (Result of interview February 19, 2024) From the description above, it can be concluded that discipline is something that must be inherent and exist in the soul of every teacher, it is proven that with the SIAGUS application, teachers have an increased spirit of discipline compared to before the SIAGUS application. In addition, the nature of responsibility with the tasks they have is also seen more clearly, because of this presence which is then directly supervised by the Surabaya City Education Office.

### **1. Bureaucracy Compliance Level**

According to Rippley and Franklin in Yulianto Kadji (2015), the level of bureaucratic compliance is manifested in an apparatus action that leads to the level of discipline of a teacher. The level of bureaucratic compliance is based on resources and the level of teacher discipline in carrying out duties and obligations. In this study, the dimension of the level of bureaucratic compliance is determined by several indicators, namely clarity related to teacher discipline in carrying out duties and obligations and the risk if the level of discipline is not achieved. Based on the research results that have been presented previously, it can be concluded that with the SIAGUS application, the level of discipline of teachers has increased when compared to before the SIAGUS application, but also besides that there are still teachers who are late so it can be said that the human resources of teachers still need to be improved. In addition, when viewed from the ease of access, the teachers also have the ability to use the application. However, there are still teacher human resources who are classified as elderly and still have to be given assistance and direction in carrying out the attendance process. This is in line with the opinion according to Tu'u (2008) that order means a person's compliance in following rules or regulations because of an encouragement that comes from outside himself usually from other people or regulations in an environment. The SIAGUS application also has risks that are accepted if the level of discipline cannot be achieved. It can be concluded from the results of previous research that in terms of teachers, in addition to the importance of utilizing technology, it must also be seen from how often the teachers are late and what are the risks accepted by the teacher if they are late. So far, from the results of the research, junior high school teachers in Surabaya City accept the risk

of being late by deducting performance allowances for Civil Servant Teachers, while for Non-Permanent Teachers (GTT) get deductions from their salaries directly. This is different in terms of deductions because GTT teachers do not receive performance allowances. Thus it can be concluded that the implementation of the Surabaya teacher application information system in the online presence of junior high school teachers in Surabaya City based on the dimension of bureaucratic compliance can be said to be good.

## **2. Smooth Routine and No Problems**

According to Rippley and Franklin in Yulianto Kadji (2015), the smoothness of the routine and the absence of problems related to infrastructure in ensuring the smooth running of the SIAGUS application, then clarity regarding the existence of an obstacle that exists in the process of implementing the SIAGUS application. This is also certainly a determining factor in the smooth running of the SIAGUS application, apart from the human resources of the teachers themselves.

Based on the research results that have been presented previously, it can be concluded that the infrastructure owned by the Surabaya City Education Office in supporting the smooth process of the SIAGUS application is quite complete and good, seen from the number of computers owned to monitor teachers also in good condition, then the existence of devices from teachers is also in good condition to be used as an online attendance tool, this is in line with the thoughts of Moenir (2006) in Kiki Armansyah (2018) defining facilities as objects that have the main function to achieve goals. Facilities and infrastructure are very important in the process of running a program. Then in terms of clarity related to the existence of an obstacle that exists in the process of implementing the SIAGUS application, the teachers feel more inhibited if the device used experiences signal difficulties so that when doing attendance, they often experience gate away. Thus it can be concluded that the implementation of the Surabaya teacher application information system (SIAGUS) in the online presence of junior high school teachers in Surabaya City based on the dimensions of smooth routine and no problems can be said to be good so that online presence can be done easily.

### 3. Performance

According to Rippley and Franklin in Yulianto Kadji (2015), every policy implementation ultimately boils down to whether the implementation process of the policy itself is effective or not. This leads to the impact caused by the performance generated in using the SIAGUS application and clarity regarding the level of performance of bureaucratic employees as program implementers.

Berdasarkan penelitian yang telah disampaikan sebelumnya, dapat disimpulkan bahwa setelah The existence of the SIAGUS application, the performance of bureaucratic employees, in this case teachers, has increased, from the results of the study it is also explained that it is not only discipline that is the benchmark for the successful implementation of the SIAGUS application, but also the performance of teachers in carrying out their duties and obligations. Teachers are required to have a high attitude of discipline and minimize violations that occur after the SIAGUS application. This is in line with the opinion of Afandi (2018), Performance is the result of work that can be achieved by a person or group of people in a company in accordance with their respective authorities and responsibilities in an effort to achieve organizational goals illegally, not violating the law and not contrary to morals and ethics. Then in terms of the impact caused by the performance generated in using the SIAGUS application. From before the SIAGUS application, the attendance process was very different, it also had an impact on the discipline possessed by each teacher. The SIAGUS application also certainly increases teacher discipline, that previously teachers were not afraid of violating because the attendance process was carried out manually, now teachers are more afraid of committing violations. As stated by Mrs. Sri Wulandari, as the head of the qualification planning section, teacher competence and education personnel that teachers are more afraid to commit violations because with the SIAGUS application, everything is connected not only to schools, but also directly connected to the Education Office which is tasked with monitoring and evaluating teacher performance.

## **Conclusion**

Based on the results of the research that the author has described regarding the implementation of the Surabaya teacher application system for online attendance for junior high school teachers in Surabaya city in accordance with the research focus that has been determined based on 3 (three) research focus dimensions, namely bureaucratic compliance, smooth routine and no problems and performance, the following conclusions can be drawn: The dimension of bureaucratic compliance, the discipline of teachers in carrying out their duties and obligations that have been carried out well as well as the obligations and risks received if the level of discipline cannot be achieved which is used as a reference for teachers. form of responsibility if they commit a violation. The routine dimension is smooth and there are no obstacles, the smooth running of the Sigus application is also quite good, but in terms of resources for elderly category teachers, it must also be accompanied by mentoring and socialization methods. The implementation of Sigus application is also quite good, as well as the clarity of the existing obstacles. In the implementation process of Sigus application, there are obstacles that can be solved well. Performance, dimensions, Sigus application turned out to have a positive impact such as increasing the level of teacher discipline, as well as clarity about the level of performance. bureaucratic employees as program implementers can be carried out well. From the above conclusions, the author can provide suggestions as follows, the Surabaya City Education Office must be more active in conducting mentoring and socialization activities related to elderly teachers who use online attendance, besides that the Education Office with the Sigus application must also better supervise teachers so that lateness can be minimized, besides that even though it is said to be maximum, the facilities owned by the education office must be improved to better anticipate in the future if there are obstacles in their use, then every junior high school principal in Surabaya City is also required to be indiscriminate and take action against unscrupulous teachers who are often late even though they have used the Sigus application. The assertiveness of the principal also determines the performance and the impact that will be obtained by the teacher himself.

For this reason, as a researcher, I suggest that future research can improve the research that has been done by further researching the dimensions of technology utilization policies in supporting teachers' duties and obligations using various theories and focuses that can certainly update current and previous research.

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