

## Research Article

# Online-Based Performance Report Service: An Effort to Reduce Teachers' Administrative Workload

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During the pandemic, the demand for professionalism has become a new administrative workload for teachers in their academic careers. The biggest source of stress for teachers comes from the lack of administrative support; it amounts to 34% and is the number one cause of stress. For example, many teachers in Indonesia work in remote and geographically challenging areas far from the government offices that oversee them. This study examines the model and strategies for effective administrative services to support teachers in the new normal. A descriptive analysis was employed for the study. Data were collected from participatory observations and semi-structured interviews with 8 key informants at 4 education offices at a regency level. It was supported by an inductive analysis to answer the question related to the extent to which the online-based performance report service could reduce teachers' workload and help for better recording of performance data. The findings implied that the online-based performance report service could reduce the problem in the direct or offline system of teacher administration services. The program will be successful under 3 main aspects of suitability: (1) between the program and its benefits, (2) between the program and the implementation, and (3) between the program and the implementing organizations. In conclusion, the online-based administration system will be effective if inhibiting factors are eliminated, including the long bureaucratic process and dual loyalty in our education sector.

**Keywords:** administrative service, education policy, SISDUPAK

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## 1. Introduction

This study is crucial to helping teachers maintain excellent work ethics amid very demanding administrative stuff. Many factors cause teachers to underperform, including meeting professional standards for teachers, criteria associated with effective teachers [1], and teacher competency [2]. Most teachers in Indonesia seem to find it hard to focus only on teaching due to very demanding administrative stuff [3]. The administrative workload of teachers has been a problem for the country's education system. Table 1 shows various administrative matters that preoccupy teachers. Hermawan. (2020).

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TABLE 1: Administrative Workload of Teachers in Indonesia.

| Aspect  | Job Description  |
|---|--|
| Creating a learning model or framework based on the latest curriculum   | Selecting competence based on their education units<br>Specifying evaluating indicators to determine competence achievement<br>Developing learning systems<br>Planning learning based on student's and school's conditions<br>Developing learning tools, including syllabi and assessment systems  |
| Preparing administrative matters for professional allowance (Regulation of the Minister of Education and Culture Number 15 of 2018) | Keeping a record of their workload: co-curricular and extracurricular activities, a minimum of 40 teaching hours in a week (divided into 37.5 effective teaching hours and 2.5 hours breaks)<br>Playing the role of a homeroom teacher, student council coach, administrator of teacher professional organizations or associations, extracurricular coach, assessor or coordinator of teacher performance assessment, committee member of job fairs for students, professional certification bodies, on-duty teacher, etc. |

Source: Author's own work

The study identified 13 sources of stress for teachers (Trubowitz & Robins, 2003). The biggest source of stress for teachers comes from the lack of administrative support; it amounts to 34% and is the number one cause of stress. Thus, our study focuses on two tasks of teachers as the primary cause of stress: administrative matters related to professional and career allowance; this matter has been dilemmatic for teachers. Article 32 Paragraph 2 of Law Number 14 of 2005 on Teachers and Lecturers mentions that a professional teacher must be competent in 4 (four) areas: pedagogical competence, personality competence, social competence, and professional competence. Promotion to higher functional positions is important to help teachers develop those four competencies. To get a functional promotion, a teacher must meet the requirements stated by government regulations in the form of a credit score. Teachers must calculate their credit score and propose a promotion; this is where the administrative burden begins since the calculation is done manually. Our initial study confirmed that 51.2% of respondents mentioned that their administrative workload, including calculating and recording their credit scores, was burdensome; it took so much of their energy that they could not perform teaching well.

Thus, administrative ease and assistance for our teachers are indispensable to reduce their stress. Administrative workload will impact teachers' quality and productivity in performing their academic duties [5] Teachers also need administrative assistance related to their functional positions and professional careers. A more specific service must be provided to facilitate administrative matters in their unit [6]. Regulation of the Minister of Officer Empowerment and Bureaucratic Reform Number 16 of 2009 concerning Functional Teacher Positions and Credit Scores mentions that the levels of functional

teacher positions in Indonesia require administrative arrangement; the arrangement applies to all levels of functional positions from Guru Pertama, Guru Muda, Guru Madya, and Guru Utama [4,6].

Other problems also emerge related to the manual assessment of credit scores for promotions to functional positions at the local levels. The problems include (1) too many credit scores teachers must earn while the scores are not always identical with or come from students' achievement; (2) teachers must coordinate with the Education Office at the regency or city level to complete their credit scores and this divides teachers' focus between teaching and administrative matters; (3) teachers must collect and submit their documents manually and directly, and there are too many documents to submit; (4) many teachers in Indonesia work in remote and geographically challenging areas far from the government offices that oversee them; and (5) the Education Office at the regency or city level selects and checks the document manually one by one, taking too much time and energy for both the officers and the teachers. These have led to deviation and unfair practices in the selection process. It is common to find teachers commit administrative fraud, such as buying one of the requirements for certain credit scores or marking up points from officers. There are also fraud services of third parties, including making up scientific work.

These problems have led to the need for an effective administrative service and management system for educational activities. The government then issued Regulation of the Minister for Officer Empowerment and Bureaucratic Reform Number 16 of 2009 concerning Teacher Functional Positions and Credit Scores, complemented with other supporting legal bases. The Regional Government must implement a Quality Improvement Program for Educators and Education Personnel, including 6 (six) main programs. One of the programs is to develop a system to map educators and education personnel for credit score assessment, implemented through the Proposed Online-based Credit Score Assessment (Usulan Penilaian Angka Kredit Berbasis Online - SISDUPAK). This is an online system for proposing credit score assessments by teachers for promotion to functional positions at the local level. Using the system, teachers no longer have to submit their proposals for functional promotions manually, which requires a lot of time and money; the system also improves the management of educational administration services. This online system can minimize inaccuracies in proposals. It also solves the problem of teachers' lack of understanding of the required procedures and manual service management systems. The system offers more practical, fast, and accurate methods.

However, the online-based system also has internal and external challenges, including coordination problems [7] and operator limitations [8]. There are also problems with

teachers' lack of understanding and trust in the online-based system, commitment, cooperation, and satisfaction [9].

This study explores the implementation of the current administration system for teacher careers. Firstly, we examined the effectiveness of the online-based performance report service in assessing credit scores of teachers. Secondly, we examined the suitability of the online-based performance report service with the implementation targets and results during the pandemic. Lastly, we explored possible reasons for challenges in implementing education service innovations, including SISDUPAK. We expected that there would be a more in-depth study of current theoretical frameworks that explained the emerging service innovations, especially online-based administrative systems.

## 2. Method

This study employed a descriptive analysis. Data were collected from participatory observations and semi-structured interviews with 8 (eight) key informants at 4 (four) Education Offices of East Java Provinces at a regency level. A framework analysis technique was used for data analysis. It consisted of socialization, identifying thematic frameworks, editing, coding, tabulating, mapping, and interpretation. Editing was done by checking the entire list of questions returned by respondents. Coding was done after editing; we used symbols, signs, or numbers to mark the answers from research respondents. Tabulating deals with preparing and calculating the coding results presented as a table that would be interpreted.

## 3. Findings

### 3.1. Educational Administration System: Post-pandemic Challenges

Educational administration is a social process that occurs in the context of an important social system, namely (1) in the setting of educational administration (geography, demography, economics, ideology, culture, and development), (2) in education (the field of administration), and (3) in the substance of educational administration (tasks, processes, principles, and administrative behavior) [10]. Educational administration can be interpreted as the entire process of cooperation by utilizing all available and appropriate personnel and material resources to achieve educational goals that have been set effectively and efficiently [11]. It can be concluded that educational administration

is a scientific field and collaborative process with a broad scope in which the totality and use of available personnel and material resources are directed to effectively and efficiently achieve the educational goals set.

The proposed changes aim to increase the current public service, making it faster, easier, and more accountable for excellent service to service users, namely teachers at regency levels. This is the fundamental reference for the Education Offices at regional levels to implement an online-based system for teachers to ease the credit scoring process for their promotion.

Education management is an activity or series of activities in the process of managing collaborative efforts of groups of people who are members of an educational organization to attain the previously set educational goals[12]. Management in education can be defined as allocating educational resources to effectively and efficiently accomplish predetermined educational goals [13]. Thus, educational management is a collaborative effort that directs educational resources incorporated into educational organizations to achieve predetermined educational goals effectively and efficiently. In its real actions, Education management implementation is geared toward effectiveness in all elements of education., both in growth and development. Several quality aspects of education management are curriculum management, learner management, facility and infrastructure management, educator management, human relationship management, financial management, and educational personnel management [14].

Service management is a process of applying science and art to plan, implement plans, coordinate and balance service activities to achieve service or program objectives [15]. In the context of education administration or management, the Deming Cycle model is used to improve the quality of education [16]; the model involves planning, implementing, supervising or maintaining, and following up. This means that improvement is needed continuously. This effort is a basic principle of educational management, which has become a key paradigm in developing education.

To sum up, improvement of education service management refers to planning a program in education, implementing, coordinating, and completing it, including making improvements and following up on these improvements to achieve the goals of educational services or programs. Thus, the educational process has high quality if the coordination and integration of inputs (teachers, students, curriculum, money, equipment, etc.) are harmonious. The process can ultimately create pleasant learning, encourage strong motivation and interest in learning, empower students and teachers, and ease the burden on society as education stakeholders [17].

### 3.2. Adaptation of Educational Administration Technology for Teachers

Industrial Revolution 4.0 relies on cyber-physical systems and has affected many sectors, including education [18]. The education sector needs to transform by utilizing technological advances to support the management of education services through educational e-governance [19]. E-governance in education allows information adoption and ICT (information and communication technology) to increase the government's effectiveness, efficacy, transparency, and accountability in providing educational services. One of the manifestations is the use of technology for administration matters for teachers [20]. E-governance in education consists of 3 (three) main actors: students, organizations, and the overall education system. It aims to promote improved service quality and increased efficiency in the educational administration process using ICT.

Thus, the education sector needs to improve internally to create ease for teaching staff, including facilitating teachers in assessing proposals for promotion to functional positions and measuring their performance achievements. It is the government's duty to create an efficient education management system by reducing technical processes so teachers can focus more on their main tasks [3]. In Indonesia, the Regency Education Office is a regional government agency responsible for managing affairs in education, including assisting teachers from kindergarten to junior high school levels related to promotions of their functional positions. Table 2 presents the functional positions of teachers at the regency level.

TABLE 2: The Functional Positions of Teachers at the Regency Level.

| No. | Teachers     | Class. I/c | Class. II/a-II/d | Class. III/a-III/d | Class. IV/a-IV/b | Class. IV/c | Total |
|-----|--------------|------------|------------------|--------------------|------------------|-------------|-------|
| 1   | Kindergarten |            | 87               | 134                | 36               |             | 257   |
| 2   | Elementary   | 1          | 402              | 1992               | 3129             | 16          | 1810  |
| 3   | Junior high  |            | 4                | 564                | 1234             | 8           | 5540  |
|     | Total        |            | 493              | 2690               | 4399             | 24          | 7607  |

Note: Gol. means functional levels. Source: Author's own work.

### 3.3. Online-based Performance (Credit Score) Report

A credit score represents a scoring unit for each activity a teacher performs or an accumulation of scores a teacher must collect to represent their career growth. Regulation of the Minister of Officer Empowerment and Bureaucratic Reform Number 16 of 2009 concerning Functional Teacher Positions and Credit Scores mentions that a credit score represents the required competence a teacher must have to get a

promotion in the functional position. The score considers the scope of a teacher's tasks and responsibilities in guiding, coaching, assessing, and evaluating students in formal education consisting of early childhood, primary, and secondary education following the existing laws and regulations for civil servants. In other words, the credit score is a condition for teachers to show their achievement of certain competence useful for developing their skills and careers.

The Regency Education Offices are government agencies that provide services at the regency level. The offices are responsible for improving the management of educational services through various management innovations. SISDUPAK, or the online-based credit score assessment for teachers, is a system to promote functional positions in the regions. The system has been implemented since 2015. A program called Improving the Quality of Educators and Education Personnel was included in the 2017 Educational Service Work Plan as an additional basis for implementing SISDUPAK at the regional level.

### **3.4. Program Suitability**

#### **3.4.1. Suitability of the Program and Its Benefits**

A program will be successful if it fulfills 3 (three) kinds of suitability [21]. The first is the suitability of what the program offers and the needs of the target groups (benefits). In other words, SISDUPAK must meet the needs of teachers in assessing their credit scores for their promotions. Our findings revealed that the targets of SISDUPAK were teachers at levels II/a to IV/b with a civil servant status at the regency level because teachers at these levels needed to complete many credit scores for promotions. Some teams, including the Credit Score Assessing Team, School Operators, Regional Coordinators, and the Regional Personnel Office, assist the Regency Education Offices in issuing the promotion decrees through SISDUPAK.

Findings also confirmed that completing the promotion took a very long time before the online system; teachers confirmed that the online system helped them. The Regency Education Offices also agreed that the online system improved the service provided for teachers. It can be concluded that the program has fulfilled the targets' needs or benefits the teachers and the education offices.

### 3.4.2. Suitability of the Program Plan and Implementation

Findings showed suitability between the program and the implementing organizations, meaning that there was suitability between the required objective of the program with the ability of the implementing organizations. A program will fail if the implementers cannot run it. Implementation of the program takes 2 (two) stages, as depicted in Table 3.

TABLE 3: The Stages of SISDUPAK Implementation.

| April 2021                                |                   |
|---|-------------------|
| Proposal                                  | 1-30 October 2021 |
| Assessment                                | 5-9 November 2021 |
| Included in BKD and PAK number was issued | December 2020     |
| Decree on the promotion                   | April 2021        |
| October 2021                              |                   |
| Proposal                                  | 1-30 April 2021   |
| Assessment                                | 6-10 May 2021     |
| Included in BKD and PAK number was issued | June 021          |
| Decree on the promotion                   | October 2021      |

Source: Author's own work

The Regency Education Offices must ensure that the online system runs well and is understood. The offices also conducted socialization related to the implementation of the system. The program aims to improve service management to teachers for their promotions. It guarantees the timeliness, cost minimization, and transparency of the IT-based service. The requirements for SISDUPAK implementation include (1) infrastructure and facility support, (2) the capability of the implementing organizations and IT operators, (3) good coordination with many relevant parties, and (4) the capability to divide jobs based on skills.

Our observations showed that the Regency Education Offices could fulfill the requirements. SISDUPAK is also included in the e-government program (e-government to citizens) according to Presidential Instruction Number 3 of 2003 concerning National Policy and Strategy for E-Government Development.

### 3.4.3. Suitability of the Results and Implementation Targets

The observation and interview results showed that the implementation targets, i.e., teachers, agreed that SISDUPAK made their promotion process more punctual and transparent with reduced cost. The system also caused them to be more motivated and learn more about IT, which finally affected their performance positively.



A service management system represents applying science and art to prepare plans, implement plans, coordinate, and complete service activities to achieve service or program goals [22]. Within the education sector, improving service management also consists of input, process, and output. Input must be available since the initial stage because it is the raw material for transformation. Input can be resources, software, expectations, and support to guide the ongoing process. Vision, mission, goals, and objectives to be attained by the institution where the educational personnel works are examples of expected inputs. Resource inputs include human resources (principals, teachers, counselors, employees, and students). Device inputs include school organizational structure, statutory regulations, job descriptions, plans, and programs [23].

Meanwhile, in the context of education management urgency, some things must be carried out, such as curriculum management, student management, facility and infrastructure management, teaching staff management and development, community relations management, financial management, and education staff management. Thus the implementation of the online system has become urgent in teaching staff management and teacher development.

### 3.5. Supporting Factors

We found some supporting factors for SISDUPAK implementation as follows. The first factor is the commitment and motivation of leaders. The support from the authority, the Regency Education Offices, is the key factor for program success. School leaders must also be able to motivate their subordinates to do their work well. They must also give real examples in doing so to achieve personal and organizational goals [24]. The second is the financial support from the regency budget for the program implementation. Funding is based on fairness, sufficiency, and sustainability. The third is a clear legal and policy foundation. There are laws, regulations of the minister, and work plans of regional offices. There are also external supporting factors for the implementation of the online system. The government and relevant stakeholders, including the public, use the available resources based on existing laws and regulations [25,26]. The policy will be more effective if it can be implemented over a long period of time and does not change when leaders change [27]. The fourth factor is the support from the target groups. Teachers support the online system and accept the technology because they consider it more practical and eases their promotion process. The last factor is good communication and coordination among offices. The Education Offices cooperate vertically and horizontally with other offices and teachers. They also conduct

socialization twice a year so teachers can coordinate and communicate about how to use the online system.

### 3.6. Inhibiting Factors

We found some inhibiting factors for SISDUPAK implementation as follows. The first is that too many actors are involved. The bureaucratic system is too long with personnel having overlapping tasks and duties leading to miscommunication in decision-making; the presence of multiple actors can hinder administrative processes [28] For example, there is an overlapping task related to issuing decrees between the Regency Education Office and the Regency Personnel Office. The second is the dual loyalty of employees. The Regency Education Office and the Regency Personnel Office have more than one position to handle the educational technical affairs. In addition, teachers complain about the socialization system that only gives a chance to one teacher from one school. The third is the dual loyalty of teachers. On one hand, teachers must follow the rules of the school head, yet on the other hand, they must follow the external organization's regulations (the Ministry of Education). This dual loyalty can add more limitations to the limited education resources [29]. Teachers' main task is teaching. If they have too many tasks at school, they will depend on the school operator to finish their administrative task, including using the online system. Fraud also happens as some teachers can simply have a third party do their task to get a credit score, such as asking a third party to write a classroom action research. Obstacles in technological adoption can cause teachers to lose access to the information needed, causing them to feel isolated and frustrated [30].

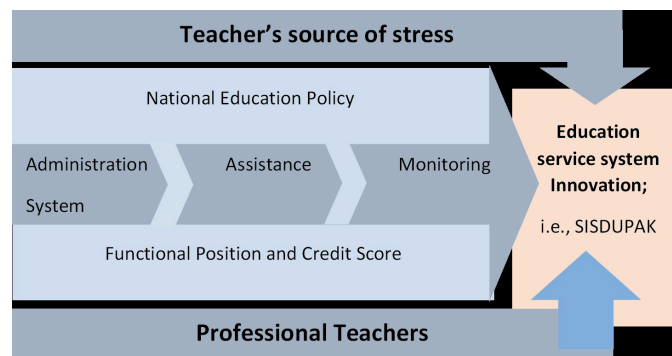
## 4. Discussion

### 4.1. Teacher and Administrative Experience Conceptual Framework

Figure 1 shows one theoretical model to help illustrate the relationship between teacher functional levels, digital systems, and educational service organization activities.

### 4.2. The National Education Policy

Teachers increasingly experience work stress apart from those caused by pressures and demands that arise from outside the school environment, such as personal, family,



**Figure 1:** The Relationship of Teacher's Workload and the Education Service System Innovation. Source: Author's own work (2022).

and economic problems [31] also due to pressure from government policies (national education policy) [32]. Research in the last few decades on the causes of stress on teachers has shown 4 (four) main sources of stress, two of which are (1) pressure from the bureaucracy or education policymakers or government agencies responsible for education, in which government officials often propose too many drastic changes to schools, including curriculum changes, the national examination system, zoning policies, infrastructure, etc.; and (2) demands for the preparation of documents or written reports on teacher performance for career and promotion. The school organization is also a source of stress, including the leadership style of the school manager, the purpose and clarity of the school's mission, and the relationship between staff and workload.

### 4.3. The Administration Technology

Digital technology and the internet were coping tools during the Covid-19 pandemic [33]. Administrative burdens related to planning, process, evaluation of learning, and reporting of learning outcomes can be simplified with technology. This study found that technological variables could reduce teachers' burden while encouraging professionalism. Our practical recommendation to the government is to facilitate teacher relationships with colleagues and teams virtually in the teacher career administration process. Administrative activities are related to prosocial motivation [34], to take and give each other at work, which encourages intrinsic motivation and individual creativity.

### 4.4. Assistance and Monitoring

This process is crucial to change the mindset from oral culture to administrative culture. A caretaker agent whose role is to make changes is needed, reflected in the awareness of the assisted teachers. The assistance has 3 (three) stages. The first is strengthening

unconscious motives or cognition. This motive is directly related to action in unusual situations, deviating from routine, such as from teaching students in a classroom to the awareness of a document-sensitive archivist. The second is discursive consciousness. This awareness is related to discursive or independent awareness. If discursive awareness between the assistant and the assisted teacher has been established, the teachers will gradually be able to put into practice the knowledge gained from the assistant [35].

#### 4.5. Service System Innovation for Teacher

To provide fast, effective, and efficient administrative services, breakthroughs in the form of sustainable digital (online) innovation are vital so that educational staff can feel the benefits in the long term. In order to improve teacher administrative services, we need at least 3 (three) things to consider in this digital era, namely (1) re-identification of business processes that are relevant to the main goals of teacher career development; (2) striving for services provided to teachers in real time and informed to schools (clarity and certainty of services); and (3) developing digital devices that support teacher mobility, such as smartphone applications that facilitate all activities and collaboration between teachers [36].

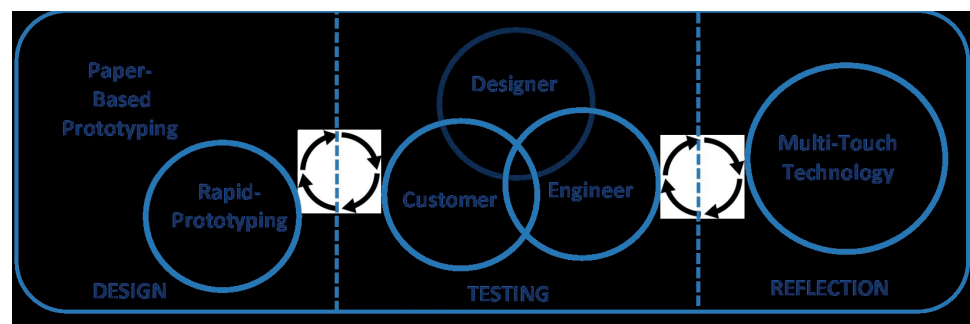


Figure 2: PSS Prototyping [37].

The Innovation Process can refer to the Innovation in Product-Service System (PSS) as shown in Figure 2 [37]. PSS consists of (1) design: paper-based prototyping, rapid prototyping, (2) testing: designer, customer, and engineer, and (3) reflection: multi-touch technology administrative services for teachers. To support these innovations, a training process related to the designed innovations is crucial [38]. PSS in the context of reducing the burden on teachers implies a shift from being responsible for personal matters to transferring or sharing affairs with others with the help of technology or service system innovation designs. Many creative young generations have established consulting services and start-ups to get opportunities from various sectors to generate

income. Thus, if they are trusted to support the development of a new teacher administration system, it will benefit both parties. PSS allows companies or individuals to share or rent products or transfer services [39] The increasing number of people from various work backgrounds and ages are turning to a usage mindset, eroding conventional services based on private ownership to mutual ownership. Usage mindset focuses on benefits rather than ownership, where people pay a certain amount of money to get benefits from these service products. This mindset is categorized as product-service systems in the PSS system that allow companies to share their personal assets, such as SolarCity, a company owned by Elon Musk. In Indonesia, many service companies or professional consultants also focus on assisting in preparing reports and documentation. Some examples include tax and financial reporting services, accreditation consultants, archive digitization services, to Instagram follower services. These service providers must be coordinated or legally conditioned to partner with the government to meet needs outside the main job function such as teacher administration duties.

## 5. Conclusion

This study aims to present a scientific and empirical analysis to provide theoretical and practical implications for teacher administrative services useful for administrators and researchers of online-based service innovation.

Our findings confirmed that the online-based reporting system for teacher's credit scores changed the traditional relationship between educational organizations and teachers, from a distant, centered, and uncertain approach into a systematic and structured one. The online system, SISDUPAK, is planned and coordinated. It is also annually evaluated. The Education Offices at regency levels also provide yearly socialization for teachers and administrators of the online system. The program is supported by the high commitment and motivation of all relevant parties. There is also a clear legal and formal foundation for the program. A good information distribution by the government for such vast and various geographical conditions is also available. All of these efforts are supported with sufficient long-term and sustainable funding. These factors support the digitalization of credit scores for teachers.

However, this context still demands other innovative ways to respond to novel challenges and to provide solutions to weaknesses related to intelligent integration between educational resources and actors. From an internal perspective of the implementing organization, there are still many additional actors involved, which hinders decision-making, and employee dual loyalty that limits the human resources' capability because they have to divide their time and thoughts to implement programs and tasks at different

institutions. The limitation of the present study is that it did not involve actor analysis. We recommend future research to study intelligent integration between educational administration resources and collaborative interdependencies which enable the formation of a wide range of smart technology configurations that are effective among teaching staff and educational institutions.

## 6. Declaration of conflict of interests

I hereby declare that to the best of my knowledge, in this article manuscript, there is no scientific work that has been submitted by others for publication, and there are no works or opinions that have been written or published by others except those cited in this manuscript and mentioned in the citation sources and bibliography. If it turns out that this article manuscript contains elements of plagiarism, I am willing to have this article canceled or canceled by the committee.

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