
PORTRAIT OF ADEQUACY OF TEACHERS IN DKI JAKARTA PUBLIC MADRASAH

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Abstract

This study aims to analyze the availability of professional teachers in public madrasahs using a descriptive analysis survey method. Respondents were 1116 state madrasah teachers (MIN, MTsN, and MAN) in DKI Jakarta. Teacher profile data obtained from Simpatika. Teacher competency data was obtained through a questionnaire in the Google form in 2021. The results showed that there was a quite significant shortage of educators in MIN of Arabic 46%; Art 45%; and Sports 53%. The class teacher has an excess of 17%. For MTsN and MAN, there are significant deficiencies in the subjects of PKN, Indonesian, Cultural Arts, Sports, and Craft-Entrepreneurship. This study recommends that the Central Ministry of Religion recruit civil servant teachers in all subjects that experience shortages. This study has implications for the management of teacher governance in madrasahs, it is necessary to pay attention to the adequacy of teachers for each eye. For the Ministry of Religion as a policy maker to pay serious attention to meeting the needs of teachers in every madrasah. For higher education institutions, it is necessary to open several departments which are currently quite limited in the availability of teachers such as teachers of arts, sports, and counseling guidance.

Keywords: adequacy; index; madrasahs; state; teachers

Abstrak

Studi ini bertujuan untuk menganalisis ketersediaan guru profesional di madrasah negeri dengan menggunakan metode survei teknik analisis deskriptif. Responden merupakan 1116 guru madrasah negeri (MIN, MTsN dan MAN) di DKI Jakarta. Data profil guru diperoleh dari Simpatika. Data kompetensi guru diperoleh melalui angket dalam google form tahun 2021. Hasil penelitian menunjukkan terdapat kekurangan tenaga pendidik yang cukup signifikan di MIN sebesar: Bahasa Arab 46%; Seni 45%; dan Olahraga 53% sedang untuk guru kelas mengalami kelebihan sebesar 17%. Untuk satuan pendidikan MTsN dan MAN terdapat kekurangan guru yang cukup signifikan pada mata pelajaran PKN, Bahasa Indonesia, Seni Budaya, Olahraga dan Prakarya-Kewirausahaan. Studi ini merekomendasikan agar Kementerian Agama Pusat melakukan penerimaan guru PNS pada semua mata pelajaran yang mengalami kekurangan. Studi ini berimplikasi terhadap manajemen tata kelola guru di madrasah perlu memperhatikan kecukupan guru untuk setiap mata. Untuk kementerian agama sebagai pembuat kebijakan agar memberi perhatian serius terhadap pemenuhan kebutuhan guru di setiap madrasah. Untuk lembaga pendidikan tinggi perlu membuka beberapa jurusan yang saat ini cukup terbatas ketersediaan guru seperti guru seni, olah raga dan bimbingan konseling.

Kata kunci: cukupan; indeks; guru; madrasah; negeri

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Introduction

“Madrasah hebat bermartabat” (Great madrasa with dignity) is the new motto (Efendi, 2020) which has been widely echoed by the Ministry of Religious Affairs since 2018 (Duta.co, 2018). Unfortunately, Madrasahs are currently not supported by adequate professional educators even though they are the main determining factors for realizing Madrasah as a superior educational institution (Baharudin, 2017; Khodijah, 2013; Mu’Alimin et al., 2020; Syukron et al., 2020). Based on data obtained from the Directorate of Teachers and Education Personnel, currently the total teaching staff in DKI Jakarta state madrasahs is 3065 people, while the number of state madrasahs in DKI Jakarta is 88. With a distribution of 654 state madrasah ibtidaiyah teachers, 1416 state madrasah tsanawiyah and 995 state aliyah teachers. Meanwhile, there are 22 primary level state madrasahs, 44 Tsanawiyah and 22 Aliyah. Professional teachers refer to the educators who meet 21st century competency qualifications (Prayogi & Estetika, 2019; Riskawati et al., 2020; Septikasari & Frasandy, 2018) It is significant to improve the image of Madrasah as the choice of parents to send their children to school (Arsyad, 2018; Syafrudin & Sujarwo, 2019) because the education in its implementation has not been supported by competent educators (Hansyah & Alawiyah, n.d.; Haryono et al., 2019; Huda, 2016) and balanced teachers (Hidayati, 2009; Tabrani ZA, 2013). On the one hand, public Madrasah in DKI Jakarta experience a significant shortage of educators in the fields of religion, arts and sports. On the other hand, there are educators in general field are dominant in number, yet their professional competence has not been convincing. Thus, the ambition and idealism of the government to create Madrasah as a great institution, a facility for fostering the spirit or practice of Islamic life (Muhaimin, 2007) requires serious effort and hard struggle.

To date, literature tends to view Madrasah from general and partial perspectives. A study by Arsyad (2018) at Madrasah Aliyah, Kolaka Regency shows that the school quality is still low because the eight national education standards have not been fulfilled. Umam (2016) argues that Madrasah managers have not formulated and implemented education plans. Another study on education quality control in Madrasah by Prayoga & Siti (2019); Prayoga & Kaffah, (2019) finds constraints on limited educational resources that affect the quality. Meanwhile, these scholars show that Madrasah is not professional yet upon the implementation of human resource management for educators in recruitment, selection, and placement processes (Holle, 2020; Lisnandari, 2018; Sugawara & Nikaido, 2014). Correspondingly, denotes that there are various problems of Madrasah related to the management of education (Alawiyah, 2014; Amiruddin, 2020).

This study specifically examines in depth the problems of public Madrasahs around the province by focusing on the professional teacher sufficiency index. Similar studies specific to Madrasah are still limited and not well-mapped. The fact that the related literature is limited encourages the high demand to provide information to the government as a basis for making the on-target policies according to the real conditions in the field. This study aims to describe, explore and analyze the problems of public Madrasah in DKI Jakarta province by focusing on two aspects of teaching staff standards, academic qualifications and competence. Academic qualification is the minimum level of education to fulfill by an educator with a certificate of relevant expertise. Meanwhile, the studied competencies are limited only to pedagogic,

professional, and 21st century competencies. Accordingly, three questions are answered in this paper: (a) how is the sufficiency of teachers in public Madrasah in DKI Jakarta? (b) What factors are the obstacles for public madrasahs in DKI Jakarta to meet teacher adequacy? (c) What are the implications of the current state of Madrasah in DKI Jakarta for future students?

This paper is based on the assumption that public Madrasah in DKI Jakarta could not become great/superior and competitive educational institutions because the ideal teaching staff in all fields of study has not been fulfilled. The fields of religious studies, arts and sports are neglected and marginalized compared to the general fields of study, such as general science and social science. The general field of study is considered to be more prominent for future careers. The imbalance has an impact on the very limited formation of government employees educators in the fields of religious studies, arts and sports. As a result, very few universities provide graduates in these fields of study due to the low demand.

Method

This research uses a quantitative descriptive method with a survey method. The research will be carried out in March – May 2021 at public madrasahs at the State Madrasah Ibtidaiyah (MIN) level, State Madrasah Tsanawiyah (MTsN), and State Madrasah Aliyah (MAN) DKI Jakarta. The following are state teachers and madrasah in DKI Jakarta who were the targets of the research:

Table 1. The Number of Public Madrasah in Every City of DKI Jakarta

No.	Area	MAN	MTsN	MIN	Amount of Madrasah
1	East Jakarta	9	18	7	34
2	Central Jakarta	1	0	1	2
3	South Jakarta	4	9	6	19
4	West Jakarta	6	10	4	20
5	North Jakarta	2	4	3	9
6	Seribu Island	0	1	1	2
	Total	22	42	22	88

Table 2. The Number of Teacher Public Madrasah in Every City of DKI Jakarta

No.	Area	MAN	MTsN	MIN	Amount of Teacher
1	East Jakarta	369	622	198	1189
2	Central Jakarta	44	0	27	71
3	South Jakarta	276	357	203	836
4	West Jakarta	229	265	109	603
5	North Jakarta	77	131	70	278
6	Seribu Island	0	41	47	88
	Total	995	1416	654	3065

Population and Sample

The populations of this study are all civil servant teachers within the five areas of DKI Jakarta. It adopts convenience sampling technique. The technique is used due to the Covid-19 pandemic by which the researchers cannot possibly meet the research subjects face to face in addition to the limited time and costs. The researchers distribute questionnaires to the

respondents through Google form through the headmasters of public Madrasah. The total of the respondents who participated in the questionnaires are 1116.

Data Collection Technique

The data collected is in the form of primary data and secondary data. Primary data was collected through a questionnaire. There are 21 questions, consisting of 18 closed questions about professional competence, pedagogic, and 21st-century skills, the rest are open questions about the experience of teachers teaching in Madrasahs. This questionnaire was prepared by adapting the competency assessment instruments used in Teacher Professional Education. The questionnaire is compiled in statements with 5 categories of the Likert model scale, namely (VG) Very Good, (G) Good, (A) Moderate, (F) Fair, and (L) Less. The questionnaire instrument before being used to collect data should first pass the concept validity test, empirical tests, and reliability test. Conceptually, the questionnaire refers to the construct having been formulated. To find out the validity and reliability empirically, the questionnaire that has been prepared should be first tested. To measure the validity of the instrument, the researchers adopt the Pearson correlation formula and the level of instrument reliability using the Alpha Cronbach formula with SPSS software version 25. The secondary data are the profiles of all Civil Servant Teachers, which are accessed from SIMPATIKA through the Head of Madrasah Education at the Regional Office of the Ministry of Religious Affairs and the Head of Madrasah Section at the Office of the Ministry of Religious Affairs of DKI Jakarta. To strengthen and complete the data, the researchers also conduct interviews and FGD. Interviews with teachers could not be conducted because there was a health emergency at that time, and government policy prohibited teachers from coming to Madrasahs. Under these conditions, the study could only conduct interviews with 9 madrasah heads and 5 heads of the Madrasah Education Section. The FGD was conducted with 27 Heads of Sections, Heads of the Madrasah Education Section at the Regional Office of the Ministry of Religion of DKI Jakarta.

Data Analysis Technique

The data analysis techniques adopted are quantitative and qualitative analysis. Quantitative analysis includes descriptive analysis by presenting data in tables, graphs, and descriptive statistics (Cohen et al., 2017). To proceed with the data statistic, the researchers use SPSS software. Meanwhile, the qualitative analysis is by writing a narrative of the data and comparing it with theory and literature on the research topic. To calculate the sufficiency of teaching staff for each educational unit, the researcher uses the reference to the Regulation of the Minister of State for Administrative Reform and Bureaucratic Reform, Number: 26 of 2011 concerning Guidelines for the Calculation of the Number of Civil Servants Needs for Regions. For elementary school teachers, the calculation formula is $JGSD = JRB + 1 KS + 1 GP + 1 GA$

Note:

JGSD = the number of elementary school teachers

JRB = the number of study groups/classes

KS = headmaster

GP = teacher of physical education and health sciences

GA = teacher of religion subject (for religion teacher at least 1 person)

The analogy for this formula is used to calculate teacher sufficiency for each Madrasah Ibtidaiyah by adding the variable needs of religious teachers (Quran, history of Islam, Fiqh, Moral Aqidah, and Arabic). The need for education staff of Junior High Schools and Senior High Schools consists of principals, subject teachers, and supervisory teachers. Calculation of subject teacher needs and components for calculating subject teacher needs are (a) the number of hours of lessons that must be carried out by a teacher per week (set at least 24 hours), and (b) the allocation of effective learning time per subject per week. The effective study time allocation is 42 hours per week or 1,680 hours per year. The duration of 1 class is 45 minutes, including time for spreading assessment of student progress and learning outcomes. Based on the allocation of effective study time per week per subject, the formula for calculating the need for subject teachers is:

$$JGMP = \frac{JRB \times W}{24}$$

Note:

JGMP = the number of subject teachers

JRB = the number of study groups/classes

W = time allocation per week

24 = the number of hours required to teach per week

Results and Discussion

Results

Teacher Sufficiency in Public Madrasah around DKI Jakarta

This study found a deficiency of teachers on particular subjects, but an excess of some others. For State Islamic Elementary Schools (MIN) in all cities, there found an excess of classroom teachers. The number of classroom teachers exceeds the number of the existing study groups. On the other hand, there found also a lack of educators, especially in the subjects of Physical Education, Sports and Health (PJOK), Arts, and Foreign Languages. The different issue happens to State Islamic Junior High School (MTsN) and State Islamic Senior High School (MAN), most of which experience teacher deficiency. Table 2 presents the real condition of public Madrasah around DKI Jakarta concerning teacher deficiency.

Table 2. The Education Staff of Public Madrasah in DKI Jakarta, 2021

Education Unit	City	Real Condition	Subject for Teacher Deficiency
MIN	North Jakarta, Central Jakarta, and Seribu Island	Excessive classroom teachers (up to 12 teachers)	Most MIN lack teachers in PJOK Subjects, Arts, and Foreign Languages (Arabic and English)
	West Jakarta	Excessive classroom teachers (13 teachers)	
	South Jakarta	Excessive classroom teachers (16 teachers)	
	East Jakarta	Excessive classroom teachers (12 teachers)	
MTsN	North Jakarta, Central Jakarta, and Kepulauan Seribu	Lack of 47 Teachers	Civic Education, Indonesian, Social Sciences, PJOK, Arts and Culture, Information Technology (IT), and Guidance and Counseling

Education Unit	City	Real Condition	Subject for Teacher Deficiency
MAN	West Jakarta	Lack of 68 Teachers	Quran Hadist, Civic Education, Indonesian, Social Sciences, PJOK, Arts and Culture, Information Technology (IT), and Guidance and Counseling
	South Jakarta	Lack of 78 Teachers	Aqidah Akhlak, Fiqh, Islamic History, Civic Education, Indonesian, Social Sciences, PJOK, Art and Culture, Information Technology (IT), and Guidance and Counseling
	East Jakarta	Lack of 143 Teachers	Quran Hadits, Islamic History, Indonesian, Mathematics, Civic Education, Social Sciences, PJOK, Art and Culture, Information Technology (IT), and Guidance and Counseling
	North Jakarta, Central Jakarta	Lack of 1 Teacher	In general, there is a deficiency of teachers in Indonesian, Arabic, Mathematics, PJOK, Craft/Entrepreneurship, Biology, Physics, Chemistry, Geography, Sociology, Guidance and Counseling, ICT, and special religious subjects (Science of Kalam/Hadith/Ushul Fiqh)
	West Jakarta South Jakarta	Lack of 59 Teachers Lack of 68 Teachers	
	East Jakarta	Lack of 61 Teachers	

Table 2 shows the deficiency of teachers in MTsN and MAN around DKI Jakarta, mostly in general subjects. MTsN mostly lack teachers in Guidance and Counseling subjects, followed by Arts, culture, and Indonesian subjects. Meanwhile, MAN mostly lacks teachers of Arts, Culture, and Sociology. Table 3 lists them in more detail.

Table 3. The Lack of Teachers in MTsN and MAN DKI Jakarta Province 2021

No	Subjects	Education Unit	
		MTsN	MAN
1	Civic Education	37 teachers	4 teachers
2	Indonesian	39 teachers	10 teachers
3	Arabic	0	9 teachers
4	Mathematics	0	21 teachers
5	Art and Culture	43 teachers	26 teachers
6	PJOK	17 teachers	5 teachers
7	Craft/Entrepreneurship Education	23 teachers	24 teachers
8	Biology	0	7 teachers
9	Physics	0	13 teachers
10	Chemistry	0	13 teachers
11	Geography	0	20 teachers
12	Sociology	0	26 teachers
13	Guidance and Counseling/Information and Communication Technology	0	5 teachers
14	Science of Hadis/Tafsir/ Kalam/ Ushul Fiqh	0	8 teachers
15	Guidance and Counseling	46 teachers	19 teachers

Table 3 indicates that MTsN is lack teachers in 6 six subjects. The total number of teacher deficiencies is 205. Besides, MAN experiences higher deficiency with a total of 210 people in 15 subjects. Teacher deficiency will affect the quality of learning at schools.

This study also found a data asymmetry between one system and another. 3 systems can be used to discover the number of Madrasah teachers in Indonesia, which are EMIS, SIMPATIKA, and SIMPEG. The three systems used to determine the number of teachers result in different data. It may lead to mistakes in planning and knowing the sufficiency of teachers in general. A more detailed explanation of the condition of the data of the respective system can be seen in Table 4.

Table 4. The Number of Civil Servant Teachers in Public Madrasah DKI Jakarta in 2021

Education Unit	Data Collection System		
	EMIS	SIMPATIKA	SIMPEG
MIN	No Data	536	539
MTsN	No Data	1140	1125
MAN	No Data	718	710

Table 3 shows that the data is not similar between one system and another. Even the EMIS system does not provide the necessary data regarding the number of teachers. It might complicate those who want to use the system as a part of an information resource. It indicates that the information management is not professionally managed.

A personnel information system (SIMPEG) is an application for processing, analyzing, and monitoring personnel data. The Information System for Educators and Education Personnel (SIMPATIKA) is an application for data collection for educators and education personnel used by the Ministry of Religious Affairs. The education management information system (EMIS) is an Islamic education data management system that functions to support the planning and policy-making process of Islamic education programs at the Ministry of Religious Affairs. Thus, the three systems are designed for data integrity, easy and fast data access, and smooth implementation support for effective and efficient personnel administration functions. Unfortunately, the aims and ideals of the three systems have not been realized. The data in those systems are different, even one system does not provide any data (EMIS).

Teacher Competence in 21st Century

Another aspect that is also the focus of this paper is teacher competence according to 21st-century learning. The aspects of the studied teacher competence are professional competence, pedagogical competence, and 21st-century learning competence, particularly communication and collaboration skills. The competency data are obtained through a questionnaire via Google-form. The state Madrasah teachers who fill in the questionnaire are 225 MIN, 596 MTsN, and 295 MAN teachers with a total of 1116 respondents. The data are processed by using descriptive statistics. It employs five-scale categories: very good, good, moderate, Fair, and less. The following is the score interpretation based on intervals:

- 0% – 19,99% = Less
- 20% – 39,99% = Fair
- 40% – 59,99% = Moderate

60% – 79,99% = Good

80% – 100% = Very Good

Madrasah teacher competency related to communication and collaboration skills can be seen in Figure 1.

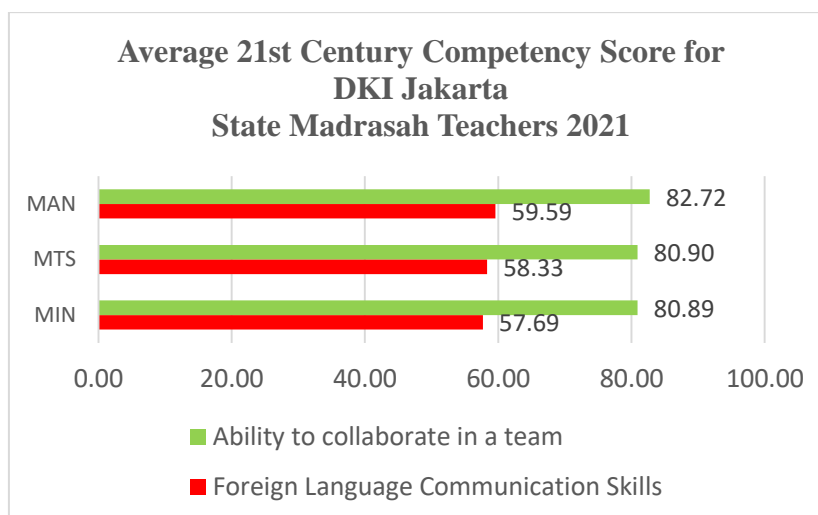


Figure 1. The Average Score of Teachers in Madrasah DKI Jakarta 2021 based on 21st-Century Competency

The test results show that the teachers' communication skills in foreign languages are not satisfying yet. The limited competence of teachers also results in the lack of achievement of the State Madrasah in DKI Jakarta. Only State Islamic Senior High School (MAN) 4 has ever won the Cayley and Fermat Olympics achievements organized by the University of Waterloo, Canada (Kemenag, 2020). Communication is one of the new demands for educators in the 21st century. In general, 21st-century competencies are formulated with the 4Cs: Critical thinking-problem solving, creative-innovative, collaboration, and communication (Hadisaputra et al., 2018; Septikasari & Frasandy, 2018; Widodo & Wardani, 2020; Zubaidah, 2019). The questionnaire found that teachers need strengthening in the aspects of communication and collaboration. Therefore, it is necessary to carry out planned and continuous training considering that both aspects determine the teacher's steps to collaborate with other parties. Improving communication skills also requires skills in information and communication technology. For this reason, technology mastery skills are also a necessity that they need to master.

According to the respondents, the ongoing formation program to improve teachers' skills is not well planned. Besides, the three personnel information management systems do not provide information regarding the education and training programs that Madrasah teachers have participated in. Several of them answered that they have attended training and workshops, such as a) training on making HOT questions; b) creating modules for students by using Bookcreator software and Microsoft 365; c) training on learning models for the field of study; d) substantive training for subject teachers; e) making online learning media; and f) training on the use of several e-learning and multimedia applications.

Discussion

The real condition of the Madrasah under the perspective of quality learning did not meet the standard requirements. One of the determinant elements of the quality of the learning process is the sufficiency of teachers. Teacher sufficiency with the workload is a precondition in the learning process. The workload of teachers has been explicitly regulated in Government Regulation Number 19 of 2017 concerning Amendments to Government Regulation Number 74 of 2008 concerning Teachers. In the context of Madrasah, the teacher sufficiency index is regulated in the Decree of the Minister of Religion Number 890 of 2019 concerning Guidelines for Fulfilling the Workload of Madrasah Teachers who are Certified. The teacher workload is a necessary instrument in the process of learning success, whether or not the teaching load is fulfilled 24 (twenty-four) hour meetings per week. In the Decree of the Minister of Religion Number 890 of 2019, there stated formula for calculating the workload and meetings and the equivalent of additional teacher assignments with the number of meetings. KMA Number 890 of 2019 is the latest regulation related to guidelines for fulfilling the workload and equivalence of Madrasah teachers. The Workload of Certified Teachers of KMA Educators Number 890 of 2019 thoroughly explores the workload of teachers. Both classroom teachers, subject teachers, guidance and counseling teachers/counselors, teachers who are assigned to be the head of Madrasah, teachers with additional tasks, as well as teachers with other additional tasks.

The workload of teachers who are certified has been determined as follows: Classroom Teacher, the workload is one class with full responsibility, authority, and right in the learning process of all subjects in certain classes in Kindergarten and Islamic Elementary School, except physical education subjects and health, religion, and Arabic subjects; Subject Teachers, with a workload of at least 24-hour meeting and a maximum of 40-hours meeting per week, in one or more educational units; Guidance and Counseling Teachers/Counselors, who are in charge of guiding and counseling at least five study groups per year, either in one or more educational units. The head of the Madrasah, those assigned to be the head of the Madrasah with an equivalent workload of 24-hour meetings. Teachers with Additional Tasks and teachers with Other Additional Tasks have equivalents with varying workloads

The presence of competent teachers is a precondition for a quality learning process (Holle, 2020; Pantić & Wubbels, 2010; Putri & Nugroho, 2016). Competent teachers are those who have a set of knowledge and teaching skills (Baharudin, 2017; Prasetyo, 2017), those who can carry out teaching tasks professionally and achieve educational goals well (Amiruddin, 2020; Creemers et al., 2013; Halimah et al., 2019). Regulation of the Minister of National Education Number 16 of 2007 concerning the standards of academic qualifications and teacher competence states that professional teachers must have 4 professional competencies, which are pedagogic competence, personality competence, professional competence, and social competence (Fathurrohman, 2019; Saefullah et al., 2019; Sitompul et al., 2019). Of the four competencies, a teacher should at least have one-year professional education.

Professionally competent teachers are ideal. The ideal teachers refer to those who can be a source of inspiration, who can motivate, think positively, be an example, be a guide, be fair and balanced, and be a true friend to the students (Ates & Kadioglu, 2018). A teacher should possess the four competencies combined with the characteristics of the ideal teacher by understanding the

learning objectives and other elements (Hamid Darmadi, 2015). Teacher competence also includes the ability to choose effective teaching methods and design interesting and efficient learning media (Yuliati & Lestari, 2018). Therefore, the ideal teacher has the pedagogical competence of 21st-century learning who are adaptive to the development of science, information technology, and communication and can use them in the learning process. For this reason, Madrasah teachers need to take a teacher professional training and development program with 21st-century character (Muhali, 2019; Prayogi & Estetika, 2019; Tarihoran, 2019; Widodo & Wardani, 2020; Zubaidah, 2019).

Professional educators in 21st-century learning require four competencies. Commonly referred to as 4C, namely: creative thinking, critical thinking and problem-solving, communication, and collaboration (Septikasari & Frasandy, 2018; Widodo & Wardani, 2020). This 21st-century learning changes the position of the teacher's role from previously the teacher as a lecturer, the sole provider of information to students or transferring knowledge to students to become a student companion, encouraging students to dare to be creative, creative by exploring sources of knowledge from the internet. Students are required to be active, surf in virtual space, seek as much information as possible, and build communication and collaboration with fellow students. The teacher becomes a motivator, supervisor, and assistant to students. In this case, the student becomes the center of the learning process, not the teacher (Darling-Hammond, 2006; Jansen & Merwe, 2015; Malik, 2018; Tridiana & Rizal, 2020).

Creative thinking is the ability of students to think by always trying to find new things, and finding innovations in the learning process. Students are not easily satisfied with what is there, ordinary or common. In this case, students are trained and accustomed to using ratios to dare to turn on their imagination, reveal new possibilities, open points of view, or generate unexpected ideas (Astra, 2018; Halim et al., 2018; Rochani, 2016).

Critical thinking and problem-solving are skills of logical, systematic, analytical, and scientific thinking. This is very important in the context of 21st-century life because of the speed of change, as well as the many disturbances and problems of life. So that students can live and respond to life properly and correctly, students must be trained and have these skills. The rapid development of digital technology apart from providing benefits and advantages for life, also brings many problems and challenges to life. For example the spread of hoax news. The ability to think critically and find problems in the problems faced is important as the capital and foundation of student life in the future society. Thus they can live independently, wisely, and maturely and be part of the solution, not the problem (Apino & Retnawati, 2017; Saputri et al., 2019; Sari Simatupang et al., 2021; Singh & Marappan, 2020).

Communication is a skill that individuals need in the 21st century, where the world has become one, and lost boundaries. The sophistication of digital technology has penetrated national boundaries, making the world borderless and unified. Humans can connect with anyone. In this context, for individuals to develop optimally, the ability to communicate with a wide audience is needed. Communication here is interpreted broadly, apart from communicating in a foreign language, it also means the ability to communicate using technological mediatization. In other words, the ability to communicate in real space and virtual space. Students who are skilled at communicating will be more successful because they can communicate with other sources of

learning information, not limited to teachers or classmates. Students need to be skilled at communicating, in the sense of being able to express their ideas well, effectively, and easily understood by others (Aljarrah & Khataybeh, 2021; Septikasari & Frasandy, 2018; Widodo & Wardani, 2020).

Collaboration is a student skill in building networks to work with others. This skill is the result or continuation of three skills: critical thinking, creative and communication skills. In building cooperation, these three skills become one unit because good cooperation can only be built and sustained if the people involved in the collaboration can communicate well and think logically, critically, and systematically (Pingrong et al., 2021; Septikasari & Frasandy, 2018; Widodo & Wardani, 2020; Zubaidah, 2019). These skills are urgent in the context of social life now and in the future considering the great opportunities that have been created by the development of digital technology, there are many opportunities to work together. In addition, urgent cooperation is needed considering the increasingly complicated and complex problems of social life require collaboration across knowledge, expertise, culture, and countries. For example, the global pandemic problem, and the current global warming.

21st-century learning is known as student-centered learning, and it stimulates students to solve problems. The teacher's role in the learning process is not only as a learning resource but also as a facilitator (de Souza Rodrigues et al., 2021; Fullan et al., 2020; Shabrina et al., 2017; Zubaidah, 2019). He or she provides the widest opportunity for students to observe, classify, interpret, predict, apply, plan research, and communicate the results. Therefore, students discover, develop their facts, and concepts and cultivate the attitudes and values required for certain learning objectives (Achadah, 2019; Saifulloh & Darwis, 2020; Wijaya et al., 2016).

Madrasah Constraint Factors

The difficulty of Madrasah transforming into a great educational institution lies in the following aspects: a) the management information system (MIS) has not been professionally managed. There have been provided three applications, EMIS, SIMPATIKA, and SIMPEG as a system that facilitate the public to view, process, and search for detailed, accurate, and valid data related to teacher information. Unfortunately, the idealism of the system has not yet been realized in Madrasah. As listed in Table 3, the three systems provide different data. Even, there found a system that does not provide any data. As a result, there is a contradictory situation in the Madrasah. Besides, there found an excess of teaching staff in particular subjects, yet a deficiency in the other subjects. It might happen because there is no valid and reliable data source to be used as a reference in the preparation of plans for the recruitment of educators, teacher placement, guidance, and teacher professional development. Therefore, this study confirms the result of the previous studies that Madrasah needs a management strategy for the professional development of educators (Chotimah, 2018; Novira & Syamsul, 2020; Putri & Nugroho, 2016; Sugawara & Nikaido, 2014).

The results of the interviews with the heads of Madrasahs conclude that it happens because the process of answering the request for new teachers from the Central Ministry of Religious Affairs is quite long. As a result, Madrasah managers hire private workers. When the vacancy has been filled for several years by honorary staff, the civil servant teachers come. This situation is

further complicated because the policy of mutation is usually followed with strong resistance from teachers, as shown in the following interview excerpts:

“The policy of mutations is good and useful for the progress of the organization. However, the environment in Madrasah DKI Jakarta is different. There is strong resistance if the leader makes mutations for various reasons, such as the long distance from home to school, and feeling comfortable and fit with the workplace. Moreover, those who work in the private Madrasah receive an allowance from the DKI Regional Government. In fact, in general, mutations tend to be considered as punishment” (Head of Madrasah Education, Regional Office of Ministry of Religious Affairs, Jakarta March 19, 2021).

“The policy of mutations is good and useful for the progress of the organization. However, the environment in Madrasah DKI Jakarta is different. There is strong resistance if the leader makes mutations for various reasons, such as the long distance from home to school, and feeling comfortable and fit with the workplace. Moreover, those who work in the private Madrasah receive an allowance from the DKI Regional Government. In fact, in general, mutations tend to be considered as punishment” (Head of Madrasah Education, Regional Office of Ministry of Religious Affairs, Jakarta March 19, 2021).

“The mutation policy eventually creates an unfavorable atmosphere because there is strong resistance. Teachers tend to think less positively if they are transferred” (Section Head for Madrasah Education in South Jakarta, March 23, 2021).

“The transfer seems to be perceived as a punishment, so it is very difficult to implement the policy” (Section Head for Madrasah Education in North Jakarta, March 29, 2021).

“Issuing the policy of transferring Madrasah teachers is not easy because it is considered a punishment. There are many reasons for refusal, including the distance from home to the selected Madrasah” (Section Head for Madrasah in West Jakarta, April 14, 2021)

“Transferring madrasa teachers continues to face resistance and even creates an atmosphere of conflict. The policy is seen in a minor way. So, if a teacher is transferred, he or she is considered to have made a mistake” (Section Head for Madrasah in East Jakarta, April 9, 2021).

The FGD which was held on May 28, 2021, at the DKI regional office, was attended by the Head of the Madrasah Education Division, Head of Madrasah Education, Head of Madrasah Education Section, and all heads of Madrasah education sections in DKI Jakarta, and Seribu Islands. The researcher revealed the data findings related to the sufficiency of Madrasah teachers. All participants acknowledged and agreed that Madrasah experienced teacher deficiencies and difficulties in transferring civil servant teachers.

The factual condition of the Madrasah will inevitably have implications for the quality of the teaching and learning process. The fulfillment of teaching staff in terms of quantity and quality is the foundation of learning. Teachers are the spearhead of learning, and they must be able to plan, implement a quality teaching and learning process (PBM), and have a good skill in learning (Hadisaputra et al., 2018; Darmadi, 2015; Rahman, 2018). Teacher skills are needed to provide meaningful and fun learning for students. Limitations on communication skills with foreign languages result in obstacles in accessing information from the internet. One of the obstacles the teachers in the learning process at Madrasah is the lack of mastery of technology. Teachers still

find difficulty in making variations of the teaching materials, such as using videos, games, and quizzes. It leads to an unwanted learning process that is less interesting or monotonous. Thus, mastery of ICT becomes a precondition for success in learning.

The Master Plan for Madrasah Education Development 2010-2030 states that the vision of Madrasah is to create a superior and competitive school. Meanwhile, the mission is to strive for the realization of the Madrasah as an educational institution based on knowledge and religious values that are superior, qualified, and competitive. Further, the purpose of the Madrasah is to create Indonesian people who are religious, scientifically capable, skilled, and professional. Based on the current actual conditions, Madrasah needs to make serious efforts to improve and meet the sufficiency of competent and professional education personnel. It is a precondition to achieving the vision and mission that has been set.

Conclusion

Madrasah, which is expected to become an excellent educational institution and produce productive and high-quality young people with decent character experiences a teacher deficiency. Even though the teacher is a determining element in the quality learning process, public Madrasah in DKI Jakarta per 2021 in general in all education units from MIN, MTsN, and MAN lack teachers. Therefore, this study recommends the appointment of civil servant teachers for Madrasahs. In addition, the improvement of teachers' soft skills in foreign language, technology, pedagogy, and professionalism is urgently needed by conducting planned, periodic, and continuous pieces of training.

This study has implications for the management of teacher governance in madrasah, it is necessary to pay attention to the adequacy of teachers for each eye. For the Ministry of Religion as a policy maker to pay serious attention to meeting the needs of teachers in every madrasah. And finally, for higher education institutions, it is necessary to open several departments which are currently quite limited in the availability of teachers such as teachers of arts, sports, and counseling guidance.

This study has limitations in two aspects, namely the data obtained is in the form of factual data taken from the "SIMPATIKA" and "SIMPEG" application systems by the directorate of madrasah, the ministry of religion, DKI regional office. The two in-depth interviews with educators have not been conducted due to the pandemic. Therefore it is necessary to carry out further studies in the future involving teachers. Thus, complete data will be obtained to improve the results of this study.

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