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Teachers voices on school reopening in Indonesia during COVID-19 pandemic

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\textbf{A B S T R A C T}

The COVID-19 situation and school closure has brought intense impact to millions of students and teachers. However, there is a growing pressure from parents, teachers, and children for schools to reopen and the national government has developed guidelines if schools going to reopen. This study is conducted to assess the perspective of teachers and other education personnel regarding the current situation and the outlook when schools reopen in the future. A combination of survey, focus group discussions, and interviews were conducted among school personnel (i.e. teachers, school administrator, and school principals), local education office officials, and representatives from teacher's professional associations in Indonesia. A total of 27,046 school personnel participated in the survey, making it one of the largest surveys ever conducted with school personnel in Indonesia. In addition, 53 participants were involved in the FGDs and interviews in 5 areas. Findings suggest that 76% teachers were concerned if schools reopen due to the health risks and 95% teachers preferred having a blended learning or continue using full distance learning. Nevertheless, if schools reopen, teachers expressed the needs for greater health protection among teachers and children, strengthened coordination and collaboration with local stakeholders, and further capacity strengthening to ensure that the learning process can be safe, comfortable, and effective. Specific analysis on the perspective and needs for teachers working with special needs learners and disadvantaged areas are further analysed.

1. Introduction

Indonesia has its first recorded cases of corona virus disease 2019 (COVID-19) in March 2020, and ever since the Ministry of Education and Culture (MOEC) has responded swiftly by closing schools and advise children to learn from home (Bloomberg, 2020; MOEC, 2020b; The Jakarta Post, 2020c). The MOEC policy has caused the closing of more than 500,000 schools and impacting more than 68 million students and almost 4 million teachers and other education personnel (MOEC, 2020c; 2020a).

This situation has impacted in disruption on access to quality education because learning from home requires new skills, for students and teachers, especially in education for children with special needs and education in the disadvantaged areas or also commonly known as the frontier, outermost, and least developed areas or 3T (terdepan, terluar, tertinggal) as outlined by Yarrow et al. (2020). According to the Presidential Regulation number 63 year 2020, there are 62 areas classified as 3T, where these areas have low economic level in the community, low human resources quality, lack of infrastructure, low financial ability, limited accessibility, and the characteristic of the area.

Many parents and education advocates worry on the long-term impact of the disruption on access of children for quality education, including the impact on the children's psychosocial, mental, and emotional state as well as the prolonged school closure may exacerbate existing risk factors for violence, abuse, and neglect associated with childcare at home and in institutions (UNICEF, 2020a). The impact of continued learning from home practice also pushes further the gap between the rich and the poor, as people struggling with economic conditions experience multiple challenges, including inability to purchase internet access, limitation on gadget availability, and additional challenge for family where both parents are working (ibid). Thus, the aspiration from parents and children for schools to be reopen, where 80% of Indonesians in favour of reopening schools according a survey in July 2020 (The Jakarta Post, 2020d).

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This condition then was responded by the MOEC to published a joint policy with the Ministry of Health (MOH), Ministry of Religious Affairs (MORA, who oversees religious schools), and Ministry of Home Affairs (MOHA, who oversees local governments), on school reopening measures in a restricted and limited manner (MOEC et al., 2020; The Jakarta Post, 2020c). This decision has drew criticism from teachers’ professional associations and from Indonesian Paediatricians Association as schools have limited capabilities to ensure all health protocols are adhered and there were yet effective monitoring system in place to assess the condition of the schools (The Jakarta Post, 2020b).

Furthermore, the rate of new COVID-19 cases every day in Indonesia continues to steadily increase where the number of new positive cases every day is ranging 3000 to 4000 cases in the month of September 2020 (WHO, 2020). Few studies have also shown that the cumulative COVID-19 cases could top 500,000 cases at the end of the year, where the fatality rate in Indonesia is much higher compare to other countries (The Jakarta Post, 2020c).

Therefore, this study is conducted by the MOEC to gather evidence and better understanding on the current situation where learning from home is still being practiced as well as the perception when schools reopen in the future, from the perspective of teachers and other education personnel.

2. Methodology

This study used a mixed methods approach, focusing on three distinct groups: school personnel (i.e. teachers, school administrator, and school principals), local education office officials, and representatives from teachers’ professional associations in Indonesia. Firstly, a questionnaire was distributed through the MOEC’s internal system for teacher’s professional capacity development called Sistem Informasi Manajemen Pengembangan Kompetensi dan Berkelanjutan (SIM PKB), inviting teachers across Indonesia to participate in the survey. The teacher’s participation is voluntary. The questionnaire method is selected as it is an effective way to assess change with participants in large numbers (Bell, 2007; Bird, 2009; Weisberg, 2008). Previous studies on disaster risks in education sector have also used questionnaires as the preferred way to measure risk perceptions, knowledge, and views of research participants, including teachers (V. A. Johnson et al., 2014). Moreover, using questionnaire would benefits future research to be used in time series and replication studies on disaster risks in the education sector (as highlighted by Ronan & Johnston, 2001; 2003; Ronan et al., 2010).

Secondly, focus group discussions (FGD) and in-depth interviews were conducted with local education officials and representatives from teacher’s professional associations to gather more information related to schools reopening measures. Past studies have utilised FGDs and in-depth interviews to generate evidence on people’s fears towards disasters (Thomas H. Ollemdick, 1983; T. H. Ollemdick et al., 1985; Burnham et al., 2008), their unique way in identifying and understanding risk (Mitchell et al., 2009; Haynes & Tanner, 2015), and their interest in disaster risks (Back et al., 2009; UNISDR & Plan International, 2012). Therefore, FGD and in-depth interview methods are selected to explore issues more detailed and enable further clarification if needed and thus can enrich the qualitative aspects of the data (Kitzinger, 1995; Pamela Davies, 2006). This method is common to be used by researcher to gain deeper information, uncovering the views and reasoning that exist in a person (J. M. Johnson, 2001). Individual tools were developed for each stage of the research. These are available from the lead author on request. This study was approved by the University of Atmajaya.

Using a critical realist approach, the overall analysis applied a thematic focus, stressing the pursuit of a better understanding of the underlying problems (Sayer, 1992). The research was completed between mid-August 2020 and early-September 2020. Each stage of the research is discussed in the following sections.

2.1. School personnel questionnaire

A questionnaire was developed for school personnel based on previous studies related to the impact of COVID-19 to the education sector in Indonesia (Forum Anak DKI Jakarta, 2020; Kemendikbud, 2020b, 2020a; KPAI, 2020; KPAI & FSGI, 2020b; KPPPA, 2020; LPMP Papua, 2020; LPMP Riau, 2020; YPH, 2020). The questionnaire is available in the supplementary section.

Fourteen questions were developed in the questionnaire comprise as follows: 1) assessment on teacher’s perspectives on the safety when schools reopen and the steps that have been undertaken to prepare for school reopening; 2) identifying important stakeholders required to support school reopening; 3) assessment on teachers’ concerns on the possible negative impacts related to schools reopening; 4) the preferred method of teaching during COVID-19 situation; 5) assistance required to support teaching when schools reopening as well as teacher’s needs to strengthened their capacity; and 6) identifying effective ways to disseminate information among teachers.

Furthermore, five questions are using 5-scale Likert to investigate on the concerns of teachers related to schools reopening, and the teacher’s assessments on how the health protocols can be adhered during school time. Four of the most important health protocols were selected based on policies issued by the Ministry of Health (MOH) and MOEC, consists of: a) use of mask while in school; b) practice safe distancing at least 1.5 m; c) handwashing with soap when arriving in school, entering classroom, exiting classroom, and after class; and d) checking body temperature using thermo gun when arriving in school.

The questionnaire was reviewed with several academic colleagues and MOEC official that are expert in this field. The self-completed questionnaire was distributed by the MOEC to all teachers that were registered in the system. Approximately 4 million teachers are registered in the system as of September 23, 2020. An explanation of the nature of the research, including its purpose and ethics approval, was provided. A total of 27,046 school personnel from all provinces in Indonesia completed the questionnaire. The teachers’ survey is among the first of its kind using a new system, SIM-PKB, where there are approximately 4 million teachers registered in the system. The authors decided to stop the data collection after 12 days of data collection since more than 27,000 respondents have participated in the survey.

The survey participants were from all education levels, ranging from kindergarten to senior high school’s teachers and from both public and private schools. This survey did not include teachers from religious schools because these schools are overseen by the Ministry of Religious Affairs (MORA) and not the MOEC. Religious schools in Indonesia are around 78,000 schools (about less than 20% of the total schools in Indonesia). Out of the 27,046 school personnel, 14,937 were women (55%), 1247 were teachers from 3T areas (5%), 7027 were teachers in schools with children with special needs (26%), and 13,077 were teachers in the 5 provinces with the highest number of COVID-19 cases. Most teachers were 31–45 years old (56%), followed by younger teachers 18–30 years old (25%), and older teachers 46–65 years old (19%). No teachers older than 65 years old took part in the study. Descriptive statistics in Microsoft Excel were used to analyse the data. This study was approved by the Ethics Committee of Atma Jaya University.

2.2. Focus group discussion and in-depth interviews

The FGD was organised 4 times inviting participants from 18 districts in 7 provinces (North Sumatera, West Kalimantan, Central Sulawesi, North Maluku, East Nusa Tenggara, Papua, and DKI Jakarta), most of them are 3T areas. The FGD was conducted online using Zoom tele-conference software and the duration is ranging from 90 to 180 min (areas with limited internet connection tends took longer duration due to connection issues). The participants in the four FGDs are: 1) teachers from schools with children with special needs (6 teachers); 2) teachers from schools with children with special needs (6 teachers); 3) teachers 18–30 years old (25%); and older teachers 46–65 years old (19%). No teachers older than 65 years old took part in the study.
from the 3T areas (12 teachers); 3) school principals and school supervisors (14 people); and 4) representatives from teachers’ professional associations (15 people). Out of total 47 participants of FGD, 22 were women.

Additionally, in-depth interviews were conducted with 8 people, 3 persons were the head of Provincial Education Office (from Papua, West Kalimantan, and East Nusa Tenggara provinces), and 5 persons were the head of District Education Office (Nias Selatan, Sambas, Jayawijaya, Ternate, and Ngada). Each interview last for 30–60 min and conducted virtually.

The number of participants in the FGDs were relatively small (6–15 people), which is considered an ideal number for FGD on non-commercial topics (Krueger & Casey, 2015). The small size allowed time for in-depth discussions and clarifications. The participants were middle to senior level staff with more than ten years of experience in the education sector in Indonesia.

The aim of the FGD and interview was to strengthen and triangulate data on the challenges and recommendations regarding teachers concerns on schools reopening. A series of discussion topics was developed based on the findings of previous studies that were also referenced the school personnel questionnaire (see school personnel questionnaire section) and also the authors experience of working as an NGO in supporting teachers in the education sector. However, as is best practice with in-depth qualitative research, it was also the intention for participants to discuss other topics they felt were important to ensure coverage of a wide range of issues related to teachers concerns and well-being (Kitzinger, 1995). Topics explored in the FGD and interviews included: implementation of current policies on learning from home and schools reopening, effectiveness of current monitoring on education practices, mapping of existing policies and relevant stakeholders, identifying barriers and challenges related to school’s leadership and management, teacher’s benefit, and recommendations for policies and practices related to teachers and schools reopening.

FGD and interview participants were briefed on the nature of the research, including its purpose and ethic measures approval. Participants were also asked for their permission to be audio recorded. All participants were active in each session and shared their own perspectives and experiences. The audio recording was transcribed verbatim and the transcripts analysed using a thematic and inductive approach.

3. Results

The following section describes the results from the two stages: school personnel questionnaire as well as FGD and interviews with local education officials and representatives of teacher’s professional association.

3.1. School personnel questionnaire

3.1.1. Teachers perspectives on schools reopening situation

The survey results show that almost all respondents (95%) agree to conduct distance learning and/or using combined approach between distance learning and in-class learning, and only around 5% of respondents who agree to conduct full in-class learning (Table 1).

When we compare between teachers working in 3T and non-3T areas, there were much more teachers in 3T areas (26%) who prefer to do distance learning using offline methods compare to teachers in non-3T areas (11%). There are not much different between teachers for children with special needs and regular teachers. However, there where only 3% of teachers who prefer to do in-class learning in provinces with high number of COVID-19 cases compare to 7% of teachers in provinces with low number of COVID-19 cases.

The survey results also show that only 24% of teachers who believe that the situation is safe in schools and little possibilities for COVID-19 transmission. Most teachers believe that schools were less safe (37%), unsafe (12%), or unpredictable (26%) on the chances of COVID-19 transmission in schools.

Moreover, the teachers in 3T areas believe that the condition of the school will be safe are higher (30%), compare to teachers in non-3T areas (24%).

We also assess teachers’ opinion in relation to schools reopening, and most teachers were concerned (46%), very concerned (14%), and unsure (16%). This opinion was also shared with junior teachers compare to senior teachers, where teachers who were concerned and very concerned were 56% (for teachers age 18–30 years old), 59% (31–45 years old), and 67% (46–65 years old). Teachers for children with special needs were more concerned (64%) compare to regular teachers (59%). Interestingly, male teachers were much more unconcerned and very unconcerned (30%) compare with female teachers (19%). This also correlates with previous parameters where the male teachers were generally more confident compare to female teachers in terms of school safety from COVID-19 and more male teachers preferred to do in-class learning.

When we asked on what do the teachers concerned of, many teachers concerned that when schools reopen, the students may be infected by COVID-19 (44%), the teachers may be infected by the disease (37%), and some concerned that the other household members (e.g. parents, grandparents) may be infected by the disease (23%). Teachers for children with special needs were generally more concerned with the possibilities of infections compare to regular teachers (Table 2).

On the other hand, teachers working in 3T areas are more concerned with the learning process that may be uncomfortable (33%) and ineffective (28%), compared to teachers in non 3T areas with 29% and 23%, respectively (see Table 4).

3.1.2. Teachers’ requirements during COVID-19 situation

The survey assess support required for schools to support schools reopening. Most teachers responded on the needs of Personal Protective Equipment or PPE (e.g. masks, face shield) and handwashing stations, incentives/access for internet or mobile credit (to support for distance learning), as well as monitoring and supervision from other institutions (Table 3).

Female teachers were more concerned with the support of PPE where

### Table 1

Responses on the preferred teaching method in their areas.

| Description                          | Total response | %    |
|--------------------------------------|----------------|------|
| Combination of distance and in-class learning | 12,119         | 44.81% |
| Fully distance-learning using online methods | 10,291         | 38.05% |
| Fully distance learning using offline methods | 3177           | 11.75% |
| Fully in-class learning              | 1459           | 5.39% |
| Grand Total                          | 27,046         | 100.00% |

### Table 2

Responses on if you are concerned, what do you concerned of when schools reopen? (respondents may select up to three options).

| Description                                                                 | % from teachers for children with special needs | % from regular teachers |
|-----------------------------------------------------------------------------|-----------------------------------------------|------------------------|
| Concerned that the students may be infected by COVID-19                     | 47%                                           | 43%                    |
| Concerned that the teachers may be infected by COVID-19                     | 40%                                           | 36%                    |
| Concerned that the learning process will be uncomfortable (due to the health protocols that need to be in place) | 31%                                           | 29%                    |
| Concerned that the learning process will be ineffective (due to the health protocols that need to be in place) | 24%                                           | 24%                    |
| Concerned that other household members may be infected by COVID-19         | 25%                                           | 22%                    |
70% of female teachers believe it is required compared with male teachers (59%). On the other hand, the more male teachers suggest for incentives/access for internet or mobile credit (41%) compared with female teachers (33%). Consequently, male teachers who were earlier had more opportunities and unconcerned with schools reopening think less important on monitoring and supervision (27%) compared to female teachers (34%).

Interestingly, teachers in 3T areas prefer support on learning materials (39%) compared with teachers in non 3T areas (26%). There were no significant differences on teachers’ opinion across age groups, teachers for children with special needs, and teachers located in high number of COVID-19 cases.

Teachers were also assessed on what type of technical competencies required for teachers when schools reopen, and many teachers suggest hygiene education, education management in emergencies, psychosocial support services for self and students, and joyful learning method. There were no significant differences on the results across age groups, teachers for children with special needs, and teachers located in high number of COVID-19 cases. However, there were more teachers in 3T areas who emphasised the importance of hygiene education (54%) as well as curriculum and lessons plan modification (31%) compared to teachers in non 3T areas with 46% and 25%, respectively.

Almost two-third of the respondents (62%) suggesting the needs to be trained on more advanced digital skills, such as making videos to support teaching and on how to use virtual classroom applications (e.g. skype, zoom, google classroom). However, there were less interest on those topics for teachers in the 3T areas and they were more preferred to be trained on having basic IT skills, for example to develop documents and presentations, how to communicate using instant messaging applications (e.g. WhatsApp, Facebook messenger), how to browse the internet, and on how to use the email.

3.1.3. Teachers’ perspectives on the procedures when schools reopen

When asked in relation to the health protocols that are required to be applied when schools reopen, the majority of teachers (more than 80%) believe that they can ensure temperature check for students when they arrive in school’s premise; for students to wash their hands with soap when in schools; and wearing mask when in school’s premise. However, only two-third of the teachers believe that the students will be able to physically distance at least 1.5 m. Furthermore, teachers for children with special needs were less certain that the children can physically distanced with one another (68%) compared to regular teachers (63%).

Furthermore, most respondents (>75%) described the importance of stronger collaboration between local health office, local education office, and local task force, compared to other entities in the community such as the village government, the military/police, youth groups, women groups, private sectors, and NGOs.

### Table 3

| Description                                      | Total Response | %    |
|--------------------------------------------------|----------------|------|
| PPE (e.g. masks and face shield) and handwashing stations | 17,606         | 65%  |
| Incentives/access for internet or mobile credit  | 9977           | 37%  |
| Monitoring and supervision from other institutions | 8336           | 31%  |
| Learning materials                               | 7254           | 27%  |
| Communication devices                            | 6998           | 26%  |
| Swab tests                                       | 6770           | 25%  |
| Teaching guideline                               | 5581           | 21%  |
| Nutritious and balanced food                     | 4643           | 17%  |
| trainings for education personnel                | 4630           | 17%  |
| Strengthening coordination with external stakeholders | 2834           | 10%  |
| Number of responses                              | 27,046         |      |

### Table 4

| Description                                      | Total Response | %    |
|--------------------------------------------------|----------------|------|
| Hygiene education                                | 12549          | 46%  |
| Management of education in emergencies           | 11676          | 43%  |
| Psychosocial support for self and students        | 9022           | 33%  |
| Joyful learning                                  | 8809           | 33%  |
| Prevention and handling of COVID-19 cases        | 8465           | 31%  |
| Information and Communication Technology (ICT)    | 7037           | 26%  |
| Curriculum and lessons plan modification         | 6893           | 25%  |
| Disaster preparedness                            | 6554           | 24%  |
| Number of responses                              | 27046          |      |

3.2. Focus group discussion and key informant interviews

3.2.1. Concerns of teachers regarding the pandemic situation

From the FGD and interviews, participants described that due to the current pandemic situation, there cannot be “one solution fits all” approach. Several options are available, which are in-class learning, online distance learning, and offline distance learning in many areas in Indonesia, schools need to adjust and combine these three options. This situation cause significant burden to the teachers as many of them are not equipped or accustomed to have multiple teaching method in the same period of time.

“Teachers felt burdened because there is not one method that can solve all the problems” said one of the head of district education office during interview

Furthermore, participants also highlighted that the existing monitoring and supervising system is not yet effective in response to the pandemic situation. There is a lack of guidance to the teachers, lack of control from the education office, and poor communications between the schools with the local education office. The current approach is only focusing and highlighting best practices and what have been achieved. However, there is little attention on examining areas that still need to be improved and weaknesses that need to be addressed. For instance, there are many students that have difficulties to do online distance learning due to the limitation of internet access.

Moreover, the capacity of school supervisors varies, where there are some supervisors that lack communication skills, did not pay attention to detail, and let the schools operate with minimum supervision. Thus, there is a need to ensure school supervisors to conduct frequent monitoring and routine evaluation with the schools, identify issues that each school is facing, including issues on in-class learning and issues on distance learning.

The local education office needs to be proactive regarding monitoring schools, working together with the school supervisors. Control and assistance to the schools are required, including developing a checklist of standard health protocol for school reopening and conducting mass campaign to the surrounding community regarding the health protocol.

3.2.2. Teachers’ need for school reopening

FGD participants described that the availability of PPE is still lacking among teachers and learners, as there are some people who do not have the ability to procure masks. The local government’s involvement is needed to support schools in the provision of PPE and also handwashing stations. Teachers need encouragements, psychological readiness, and moral support from all stakeholders including from the local education office, parents, and surrounding community.

“The mechanism for schools reopening needs to be done in stages. Firstly, parents need to be surveyed. Then, the local education office should agree with the school supervisors to conduct monitoring for each school. PPE for school stakeholders should be provided and the local health office should perform socialisation on the health.
protocols directly for each school” said a head of provincial education office in an interview.

Teachers need protection if they must do home visit or in-class learning, especially for children with special needs since these students may have to rely on distance learning. Psychological support services may be required for children with special needs and their parents, as these children tend to have higher stress levels compared to other children, as described by the FGD participants. To support these needs, school funds should be flexible and can be tailored according to the needs of the learners.

Special attention should be placed for teachers dealing with children with special needs, including new approaches and learning methods that can be adapted for the new normal ranging from young children with special needs to vocational training for older children with special needs.

The FGD participants expressed that communication is very important among stakeholders and leadership is key during crisis. Leaders should be able to listen and understand the problems that teachers and learners face. Other key characteristics that a leader should have include open to communicate, engage, and synergise with other stakeholders; when there is a problem, he/she is willing to listen and understand and then able to provide clear direction and solution; wise and not rushed to make a decision, considers data and facts and make priorities; understand the protocols for the education sector during this situation. Parents need to be actively involved in understanding the learning process. Thus, the learning process need to be flexible as well aligning with parents’ activity, particularly for families with parents who are working. School principals should be a role model for others and need to be proactive, participative, responsive, and consistent in making decision. School supervisors should provide routine monitoring and assist schools and facilitate communication between local education office and the schools. The local education office should act as collective and collegial. The local education office plays a crucial role on coordination and collaboration and education officials should promote coordination and collaboration with other institutions such as NGOs, private sectors, teachers’ professional associations, and local leaders. In addition, the central government should be proactive in engaging with the private sector and monitor the policy implementation.

4. Discussions

4.1. General overview

Based on the survey, it is clear that most teachers are concerned for schools reopening plan and they preferred to do blended learning (combination of in-class learning and distance learning) or fully distance learning. Higher percentage was also observed particularly for teachers working in high number of COVID-19 cases. This is a significant contrast since the formal education in Indonesia in pre-pandemic time has been using in-person learning. Teachers were teaching at school at least 5 days in a week and almost never work from home. Preschoolers to high school students were learning in class composed of 20–40 students in schools. Distance learning in Indonesia is almost unheard of before the pandemic to majority of people in Indonesia. Distance learning, either online or offline (e.g. home visit, self-study at home etc) most likely to be a completely new experience for many teachers and students in Indonesia, especially in 3T areas and for special education.

Interestingly, there were higher percentage of male teachers who are more confident, unconcerned, and prefer in-class learning compare to female teachers. Concerns on COVID-19 transmission also correlates with age groups, where there were more older teachers (46–65 years old) who are concerned compare to younger teachers (18–30 years old).

Studies suggest that excessive fear and possible information overload in people may pose a danger to mental health and could lead to missing the nuances of health and safety messages (CDC, 2019). On the other hand, lack of fear may encourage lack of preparedness and ignore the surrounding risks that requires attention (Witte & Allen, 2000; Paton, 2003; Kohn et al., 2012). However, a certain degree of fear can be constructive and may be channelled in preparedness measures to encourage protective behaviours (Espinala et al., 2016; Cvetković et al., 2019).

Most teachers think that schools are unsafe or difficult to predict its safety, partly because they fear that the learners may get infected with COVID-19 or the disease can be transmitted among teachers and other household members (e.g. parents or grandparents). This is also because the common living arrangement for senior citizens in Indonesia is co-residence with their adult children (OIC, 2018; World Bank, 2016).

To address these fears and concerns regarding schools reopening, education stakeholders need to tackle the root of the problems, in this case is the health risks in school to prevent further outbreak. Therefore, teachers require PPE (e.g. masks and face shields) and handwashing stations (including also with supplies of soaps and hand sanitizer).

Furthermore, intensive monitoring should be in place, particularly in collaboration with the local health office and local COVID-19 taskforce, including also supporting the schools to educate the children and their surrounding environment (families, friends, and neighbours) regarding the health protocol. Teachers have also expressed the importance of school supervisors in monitoring the situation and providing guidance for school principals and teachers. This is because the school supervisors facilitate communication and guidance between the schools and the local education office, in which this aspect is key for a safe and effective learning environment, as highlighted by the FGD participants. Guidelines, procedures, and other tools such as checklist would be useful and this needs to be developed at the local level following the local health guidance and in consultation with the parents. The central government has urged local government to provide the required support for schools using funding disbursed from the central government or using the local provincial or district budget.

As discussed earlier, female teachers tend to be less confident and have higher concerns, and this correlates with the aspirations of PPE were much more from female teachers compare to male teachers. Meanwhile, there were more male teachers who prefer resources that supports them in the learning activities, for example incentives/access to internet or mobile credit.

In general, many teachers were requesting capacity strengthening in the area of hygiene education, management of education in emergencies, psychosocial support for self and students and joyful learning. These areas of learning have been identified as useful with the current global standards and guidance (IASC, 2017; INEE, 2010; Sphere, 2018; UNICEF, 2020b).

Mental health issue in this pandemic situation has been a growing concern in the education sector, for both the learners (particularly children) and the educators. The fear of pandemic situation and lockdowns (including also prolonged disruption of learning in school) has caused a sense of fear and anxiety around the globe that could lead to long term psychosocial and mental health implications, especially for children and adolescents, including problems that could lead to sleep disturbance, nightmares, loss of appetite, agitation, inattention, and separation related anxiety (Marques de Miranda et al., 2020; Singh et al., 2020).

There were some teachers during FGD have also expressed concerns regarding students that may not be able to achieve the Minimum Mastery Criteria. However, this is a misunderstanding or lack of understanding since the guideline that has been issued together by the Ministry of Education and Culture and the Ministry of Religious Affairs (2021) described the assessment of student learning should not be based on curriculum standards but the improvement from baseline learning levels. This also applies for students with special needs and students in 3T areas. Moreover, the guideline also outlined that the principle of assessing learning needs should consider based on the needs of the student, life skill orientation, meaningful learning, the need to provide
feed back, and the need to be inclusive.

Furthermore, several studies show that older adolescents have higher probabilities in having depressive symptoms and anxiety compared to the younger ones (Chen et al., 2020; Xie et al., 2020; Zhou et al., 2020).

Regular teachers in general aspire the needs for advance digital skills such as making videos to help with distance learning and on how to use virtual classroom. This is an indication of teachers have high interest to expand their teaching model, learning new methods, and increasing the effectiveness in doing distance learning.

4.2. Teachers working with special needs learners

There were higher percentage of teachers working with special needs learners that were more concerned on schools reopening compared to regular teachers. These teachers may also require doing home visits because distance learning may not be an effective strategy for children with special needs. Thus, measures to prevent COVID-19 transmission should be in place, including when doing home visits.

When explored further during FGD, teachers working with special needs learners would be more difficult to manage, including to practice health protocols, such as safe distancing, and wearing a mask, this is especially the case for children with mental health disorder or intellectual disability. However, due to the fear of COVID-19, teachers working with special needs learners still prefer to use online learning, even though this is challenging for the special needs learners.

Children with special needs, particularly mental and intellectual disabilities, may have higher intolerance for uncertainty, difficulties in following instructions, working independently, and problems to understand the evolving situations. When their routines are interrupted due to the imposed lockdowns and unfriendly situations, they have certain degree of exasperation and can trigger outburst of temper tantrums and conflict with their caregivers or their peers (Singh et al., 2020).

Therefore, it is important for the teachers working with special needs learners to be better equipped in assessing the mental health of their learners, promoting mental health and well-being to the learners and their caregivers, as well as knowledge on referral to mental health professionals (Singh et al., 2020). Collaboration between teachers, parents, community volunteers, and mental healthcare workers should be established to anticipate possible mental health issues, especially to children with special needs.

4.3. Teachers working in 3T areas

According to the government data, remote, isolated, and the outer regions in Indonesia have less reported cases of COVID-19 and the mobility of people are much less compare to people living in urban or semiurban areas. Therefore, it is understandable that the teachers working in 3T areas felt safer and less worried about the transmission risk, based on the survey and FGD results.

Nevertheless, for better health protection, the teachers still prefer to practice distance learning. For teachers working in 3T areas, the teachers recognised that there are technological challenges (i.e. poor internet coverage and electricity, expensive communication costs, and low IT literacy level). Therefore, the use of offline methods was more preferred, for example developing worksheets for the students, giving assignments, and requesting parents to come to meet with the teacher once a week. However, this becomes a burden to the teachers as the cost of transportation is expensive.

Furthermore, teachers working in 3T areas have less concerns on transmission risks but more concerned that in-class learning during COVID-19 situation may not be comfortable or promote effective learning experiences for the teachers and learners. This is because the current MOEC guideline stated that if school reopen, there are several restrictions that need to be adhere, including:

- In-class learning only 4 h maximum per day with no learning break and only three days a week (in pre-pandemic situation, in-class learning could be up to 8 h per day with 2 learning breaks for five days a week)
- Classroom size is limited only for 15 to 18 students (in pre-pandemic usually around 36–40 students)
- Teachers with underlying health conditions are not allowed to do in-class learning
- Health protocols must be applied at all times, including using mask, safe distancing, and no crowding at the cafeteria, library, and other public spaces.

The above conditions generate concerns to teachers where the learning process may be uncomfortable or ineffective, particularly for teachers working in 3T areas. Thus, this is aligned with aspirations from teachers working in 3T areas for support on learning materials and capacity strengthening on hygiene education, curriculum adjustment, and lessons plan modification, learning basic IT skills such as developing documents and presentations, communication using instant messaging applications, browsing the internet, and use the email system (as captured in the survey).

5. Conclusions and moving forward

There may be a time when schools will reopen again even though the COVID-19 situation is still ongoing. Therefore, if schools going to be reopened, teachers will be required to be equipped to ensure that the learning process can be safe, comfortable, and effective. Especially since most teachers think that it would be difficult to ensure safe distancing among children when they are in school.

Based on the combination of survey, FGDs, and interviews, teachers stressed a great deal of health protocols to be adhered (i.e. provision of PPE, handwashing stations, and incentives/support for distance learning) as well as robust mechanism for monitoring and supervision. This needs to be supported with coordination and collaboration with other institutions, such as the health office, COVID-19 task force, and NGOs.

Further capacity strengthening is required for teachers on hygiene education (particularly related to prevention of COVID-19), management and leadership of education in emergencies, psychosocial support, and joyful learning method. Psychosocial support capacity may be required for teachers working with special needs learners. In addition, teachers are interested to learn IT skills, particularly basic IT skills for teachers in 3T areas. Teachers working with special needs learners and in 3T areas face significant challenges that requires more in-depth and specific attention from all stakeholders.

The authors encourage conducting longitudinal studies related to teacher’s voices over time to understand better on the needs of teachers and whether these teachers have received sufficient support to conduct learning during COVID-19 pandemic situation. The information will be useful for policy makers and other organisations to identify the gaps and design program to support teachers.

Declaration of interests

☒ The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

☐The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

CRediT authorship contribution statement

Avianto Amri: Conceptualization, Methodology, Data curation, Writing – original draft, Writing – review & editing, Approval of the version of the manuscript to be listed. Yusra Tebe: Conceptualization,
Methodology, Data curation, Writing – original draft, Writing – review & editing, Approval of the version of the manuscript to be listed. Ayu Siantoro: Conceptualization, Methodology, Formal analysis, interpretation of data, Writing – original draft, Writing – review & editing, Approval of the version of the manuscript to be listed. Mega Indrawati: Conceptualization, Methodology, Data curation, Formal analysis, interpretation of data, Writing – original draft, Writing – review & editing, Approval of the version of the manuscript to be listed. Cahyo Prihadi: Conceptualization, Methodology, Formal analysis, interpretation of data, Writing – original draft, Writing – review & editing, Approval of the version of the manuscript to be listed.

Declaration of competing interest

The authors declare that they have no conflict of interest.

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Appendix A. Supplementary data

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