Research Brief: ASEF Young Leaders Summit SDG 4 - Teaching and Learning during COVID-19

1.1 Aim of Research

To say that the past year and a half has been challenging would be quite an understatement. We recognise the immense effort, flexibility, and dedication it takes for teachers to continue to teach and shape the future generations, while at the same time trying to navigate unprecedented circumstances such as the COVID-19 crisis.

The aim of this study was to hear directly from teachers living and working in ASEM countries about their experiences and needs during the COVID-19 pandemic, in order to gain a better understanding of the types of support that they think need to be provided in the future to ensure a higher quality of the education process for everyone.

1.2 Data Collection and Survey Administration

A mixed-methods questionnaire was created with qualitative and quantitative questions, and demographic variables were collected through *Google Forms*. The survey aimed to capture variables that asked teachers to rate statements on 5-point Likert scales (1 - "Strongly Disagree" to 5 - "Strongly Agree"), along with some multiple-choice and subjective questions.

1.3 Participants

A total of 181 respondents filled out the questionnaire. 53% of the respondents indicated their region as Asia (N = 96), 44.7% as Europe (N = 81), and 2.3% as Pacific (N = 4). 19.3% (N = 35) stated their gender as "male", 80.1% (N = 145) as "female" and 0.6% (N = 145) preferred not to state their gender. The sample reported a mean age of 42.70 years (range 21-65 years).

1.4 Data Analysis

Qualitative responses were coded manually by a team of 3 coders. Responses were read and placed under relevant first order codes, and then synthesized to form higher order codes. These codes were then visualized as shown in the next sections. Quantitative responses were analyzed using R v4.0.2. First, an exploratory factor analysis was performed to create factors

within the Likert-scale response-type questions (see Appendix 1 for factor structure). After creation of factors, their scores were calculated and compared across Asia and Europe using *t*-tests. Finally, Pearson correlations were calculated.

1.5 Results

1.5.1 Results from Quantitative Analysis

As seen from Figure 1, teachers from Asia reported that they received higher support from schools during COVID-19 (p < .01) as compared to teachers from Europe. Teachers from Asia also scored significantly higher (p < .05) on the perceived ability to communicate with students and parents during COVID -19. Additionally, teachers from Asia reported that they experienced greater positive impact of COVID-19 on their personal skills as compared to teachers from Europe (p < .05). Teachers from Asia and Europe, however, scored similarly on their perceived digital literacy skills and communication challenges faced while teaching during COVID-19 (see Appendix 1 to see the items forming these factors).

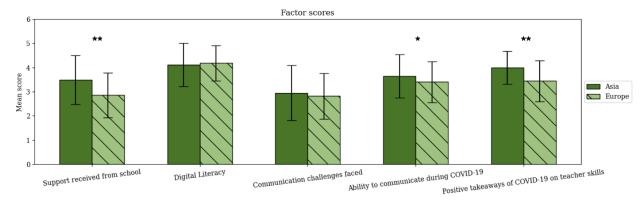


Figure 1. Comparison of scores across Asia and Europe

An analysis of Pearson correlations also revealed that in Asia (see Figure 2), support received from school was positively associated with the perceived digital literacy skills of teachers, their ability to communicate during COVID-19 and the perceived positive impact on their teaching skills. These correlations were low in magnitude for the European sample. The digital literacy skills were also positively correlated with the ability to communicate during COVID-19 and the perceived positive impact of COVID-19 on teacher skills in both Asia and Europe.

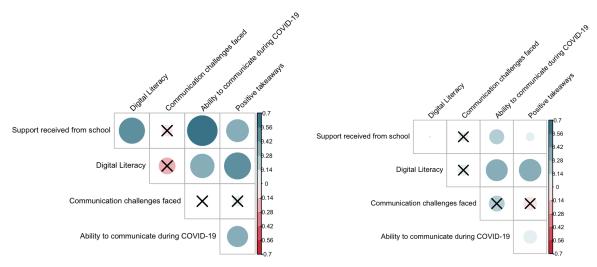
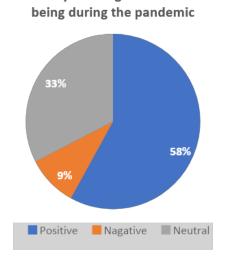


Figure 2. Correlations in factor scores (figure on left for Asia, and figure on right for Europe). Blue circles indicate positive correlations and red circles indicate negative correlations, crossed out correlations are not significant.

1.5.2 Results from Qualitative Analysis

- Effect of familiarity with digital tools on mental well-being during the pandemic

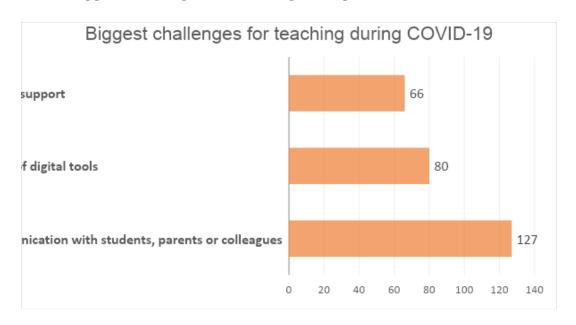
Effect of familiarity with digital tools on mental well-



• More than a half of respondents (58%) feel positive about the effect of their familiarity with digital tools on mental wellbeing. About a third said the effect is neutral while 9% of them indicated there as a negative effect on their mental wellbeing.

- Regional distribution of respondents (Asia and Europe) does not give significant difference. Approximately 53% of those who answered 'positive' are from Asian countries and 45% are from European countries (4% from Australia).
- Likewise, 41% of respondents who answered there was a negative effect are from Asia while the other 59% are from Europe.

- Biggest challenges for teaching during COVID-19



Key takeaway from each component

1. Communication

Most teachers (127 of all respondents) who responded the survey indicated communication with students, parents, or their colleagues as one of the major challenge the teaching during the pandemic. The teachers experienced communication challenges at different dimensions, both inside and outside classroom. Inequal access to digital tools is often referred to as a factor that not only hinders effective communication with students, but also limits access to learning of those from economically disadvantaged background. Other key factors mentioned are:

- Difficulty in building leaning relationship with students online
- Lack of students' motivation and engagement (including lack of attendance)
- Lack of resources (e.g., connectivity infrastructure, devices)
- Inequal access to tools/resources (due to students' socio-economic background and lack of financial support)
- Limited time to prepare for transition to online learning

2. Usage of digital tools

Usage of digital tools was also identified as a major difficulty experienced by teachers. The responses from the survey demonstrate that this is often caused by limited digital skills among teachers themselves, students, and parents. Some respondents highlighted that they were not given sufficient time to train and prepare themselves for online teaching, which often requires different set of knowledge, skills and teaching approaches. In some cases, the lack of stable internet connection serves as a barrier to online learning.

Key causes of challenges:

- Unfamiliarity to digital tools among teachers
- Lack of proper digital training for teachers
- Internet connection
- Lack of digital skills among parents
- Challenge in integrating creative learning activities new tools

3. Lack of support

Respondents also highlighted the lack of support system that teachers continue to experience throughout the pandemic period. Some indicate there is limited support system in place at school level to properly manage and administer learning during the pandemic. While some teachers underwent the increase of workload, they raised that their mental stress and wellbeing were not adequately addressed or understood.

Key causes of challenges:

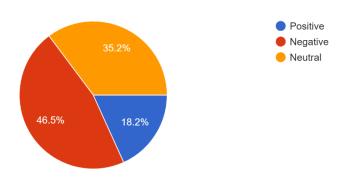
- Lack of adequate management system at school
- Increase of workload
- Lack of effort to understand and address teachers' stress
- Dealing with parents' expectation
- Lack of time and resource to explore teachers' need
- Lack of policy guidance from government authority

Lack of empathy

- Effect of changed workload on your mental well-being during the pandemic

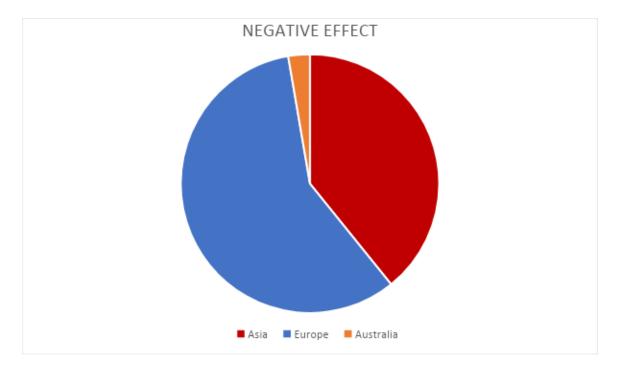
How would you rate the effect of changed workload on your mental well-being during the pandemic?

159 responses



159 out of 181 participants who replied to the survey answered this question. Almost half the participants who answered (46.5% or 74 participants) perceived the effect of the changed workload on their mental well-being during the pandemic to be negative. 18.2% (29 participants) saw positive effects, while 35.2% (56 participants) perceived the effects as neutral or didn't notice any effects.

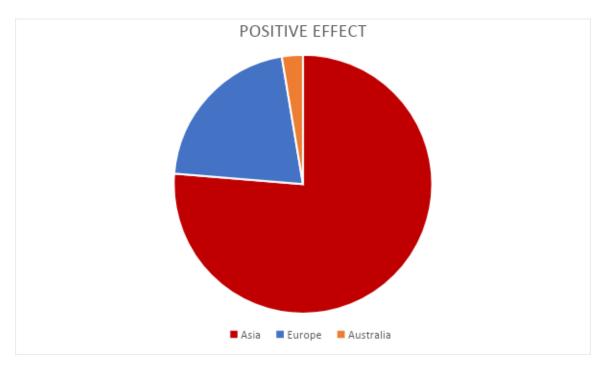
DISTRIBUTION OF "NEGATIVE" RESPONSES: 29 ASIAN, 43 EUROPEAN, 2 AUSTRALIAN



Out of the 46.5% or 74 participants who perceived a negative effect of the changed workload on their mental well-being during the pandemic, 29 were Asian (39%), 43 were

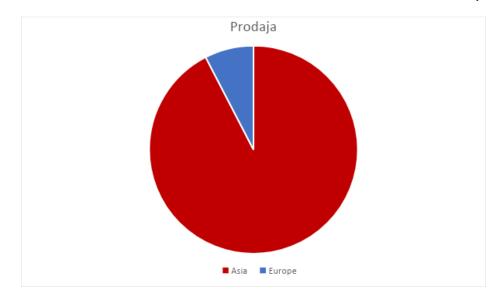
European (58%), and 2 were Australian (3%). We can see that European participants were more likely to perceive negative effects than Asian participants.

DISTRIBUTION OF "POSITIVE" RESPONSES: 20 ASIAN, 8 EUROPEAN, 1 AUSTRALIAN



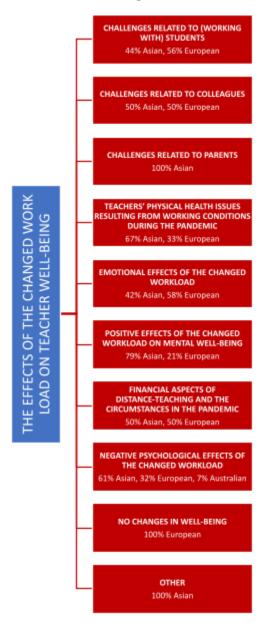
Out of the 29 participants who perceived positive effects of the changed workload on their mental well-being during the pandemic, 20 were Asian (69%), 8 were European (28%), and 1 was Australian (3%). We can see that Asian participants were more likely to perceive positive effects than European participants.

DISTRIBUTION OF "NEUTRAL" RESPONSES: 39 ASIAN, 17 EUROPEAN



Out of the 56 participants who perceived neutral or no effects of the changed workload on their mental well-being during the pandemic, 39 were Asian and 17 were European. We can see that Asian participants were more likely to perceive neutral or no effects than European participants.

Based on the content analysis of answers to the open-ended question asking the participants to expand on their perceived effects of the changed workload on their mental well-being during the pandemic, we identified the following main themes:



There are 10 main themes that were identified. When it comes to **challenges related to** (working with) students, participants listed challenges such as challenges related to assessment, grading, giving feedback and monitoring student progress; challenges in

recognising students' needs; socio-emotional challenges related to (working with) students; student accessibility considerations; and student engagement/motivation challenges.

Challenges related to colleagues included challenges in dealing with colleagues and challenges in supporting colleagues, while challenges related to parents had to do with managing parents' expectations.

When it comes to teachers' physical health issues resulting from working conditions during the pandemic, participants mentioned issues related to increased screen time, such as posture and diet, eyesight issues, and back issues, as well as issues related to decrease in physical activity.

In terms of **emotional effects of the changed workload**, the participants' answers can be divided into two main categories: positive feelings and negative feelings. One positive feeling identified by the participants was feeling in control, while the negative feelings included frustration, guilt, isolation, irritation, anxiety, uncertainty, exhaustion, stress, fatigue, and the negative mental health impact due to feelings of hopelessness and helplessness because of accessibility obstacles for students during lockdown.

Some participants also noticed some elements that had **positive effects of the changed workload on their mental well-being**. They listed WFH as a positive work environment, new skills and experiences gained due to changed teaching conditions, positive effects of the changed workload on time spent working, opportunity for more one-on-one interaction with students, readiness to adjust to new circumstances, self-motivation, availability of support, and positive psychological effects.

What is interesting is that in the theme "Positive effects of the changed workload on mental well-being", 79% of answers identified to fit into that theme came from Asian participants, while only 21% came from European participants, which fits with the statistics from the previous question, where 69% of participants who rated the effects of the changed workload on their mental well-being as positive were Asian participants. This reinforces the premise that Asian participants were more likely to perceive positive effects of the changed workload on their mental well-being during the pandemic.

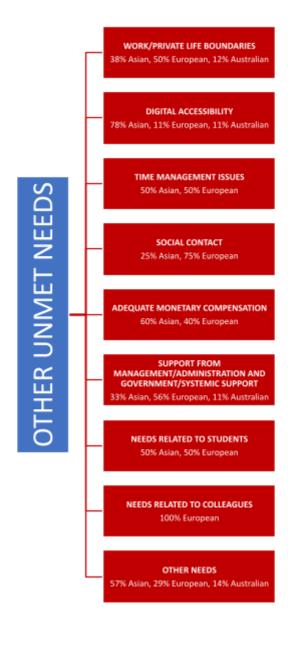
When it comes to the financial aspects of distance-teaching and the circumstances in the pandemic, participants pointed out the negative financial aspects of distance-teaching and the circumstances in the pandemic, such as inadequate compensation for increased workload and increased expenses.

The participants also noticed some **negative psychological effects of the changed workload**. These included or resulted from lack of support from school management and authorities, challenges with balancing work and personal life, increased need for teacher availability by students, parents, and colleagues, time-management challenges, lack of social contact and access to self-care activities, and difficulties in managing WFH.

Some participants said that they didn't notice any changes in well-being, while some listed effects that did not fit into any of the previously mentioned themes, such as the time difference between them and their students, additional housework, one's own attitude towards work is key in mental well-being, and the love towards teaching making the increased workload manageable.

- What were some of your other unmet needs?

At the end of the survey, the participants were asked to list any other unmet needs that weren't previously addressed in the survey. Based on the conducted content analysis, their answers can be summarised in the following 9 themes:



When it comes to work/private life boundaries participants listed time-related needs such as respect of free time, private needs, the right to not be available outside working hours, especially in the evening, enough time to maintain a work/life balance, need for personal time, and the effect of the pandemic on their free time. In this theme they also mentioned family and childcare-related needs, such as considering the point of view of families and children and resources for teachers in caring for their own children, as well as regular life needs and the need for activities outside of work.

In terms of **digital accessibility**, participants mentioned the following needs: internet accessibility, including unobstructed connectivity, a universal, stable internet connection, and an adequate internet access for students; accessibility of digital tools and infrastructure; and technical support, such as support from the ICT teacher and more training for online teaching.

Participants also mentioned **time management issues** that included a need for more time to manage all work obligations. Furthermore, within the theme of **social contact**, the participants expressed the needs such as the ability to offer and receive physical consolation, the need for human contact, the need for social contact, and the need for face-to-face communication with students.

Within the theme of **adequate monetary compensation**, participants listed needs that included allowances for costs of distance teaching (mobile network costs etc.), especially considering diminished wages, financial support, including financial support to cover extra costs of online teaching, and an attractive salary.

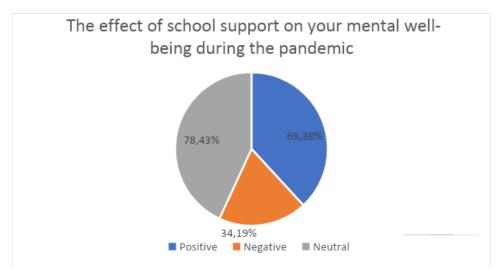
When talking about support from management/administration and government/systemic support, participants expressed the need for management/administration support, including effective crisis management skills and support from superiors, evidence of care by management, understanding from superiors, opportunities to expand expertise, management and leadership, preparation of adequate instructional materials, and an adequate cleaning of the workplace. They also expressed the need for government/systemic support, including free health and mental health services for teachers, financial services for teachers, more time and financial resources to ensure higher quality education conditions, and real care by relevant agencies. In this category, they also listed needs such as paying attention to the needs of teachers, reduction of responsibility and

bureaucracy overloads, and more time dedicated to the educational relationship and less bureaucratic tasks for teachers.

Needs related to students included a better approach to students with SEN, concerns for students' achievement and well-being, parental assistance to learners, active student participation, student motivation, and clear student progress criteria, while needs related to colleagues included awareness around loss of colleagues, cooperation from colleagues in adapting to new circumstances, and communication with colleagues.

Other needs, which could not be categorised in any of the previous themes, included easier acceptance of change, personal support, psychological needs, feeling of community, coordination with the community, physical activity, less screen-time.

- Effect of school support on teacher's mental well-being

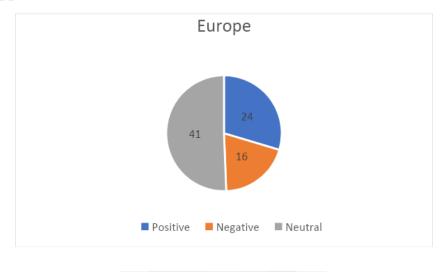


78 out of 181 teachers who participated in our survey felt that the school support had no to small impact to their mental well-being during the pandemic. 69 teachers believed that schools they work at have fully supported the teachers and helped them tremendously to survive during the pandemic. Nevertheless, there are a small number of teachers (34) whom their concerns and needs are not taken seriously by schools.

The next step of this analysis is to breakdown the survey result based on region and continent of the participants. If we lay out the survey result based on continent, we would later have a clear overview of the effect of school support for teacher well-being during the pandemic in each region.

Half of the surveyed teachers in Europe (41 out of 81) felt that teacher's support to mental and well-being had no to little impact. A third of the surveyed teachers (24 out

of 81) believed they had received adequate support for mental well-being during the pandemic. Closely followed by some teachers (16 out of 81) who did not received enough support from school.



Taking answers from the open-ended questions of our survey, there are several reasons as to why teachers in Europe felt no effect from the support provided by their schools. The responds are as follow:

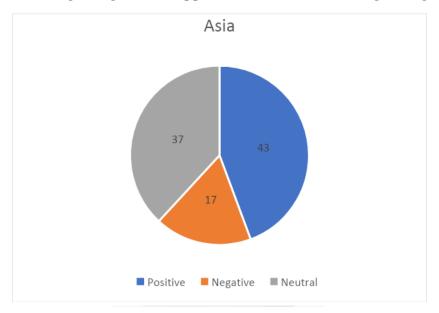
- "The experience wasn't negative or positive, I wish that I had received some sort of education to know how to conduct online classes."
- "School support has been helpful; knowing you always have people you can count on, ask them questions etc. is great. However, nobody can take away the increased workload for me."
- "They have shown some verbal support, but not much practical one, really"

However, there are also some teachers in Europe who had received good supports from their schools. For example:

- "When given, the support has of course been positive. The colleagues have tried to support each other as well as they could, and the head teacher has also mostly been supportive."
- "School management and all colleagues, everyone, supported each other."
- "There was very much a 'we're all in the same boat' attitude and absolutely everyone helped if one had a query or was unsure of something. Staff meetings were held regularly online."

On the other side in Asia, almost half of the surveyed teachers (43 out of 97) acknowledged that they have obtained good support from school for their well-being

during the pandemic. Moreover, 37 out of 97 teachers experienced no effect from the school support for their well-being. Lastly, there are still some teachers (16 out of 97) had negative experience regarding school support for teacher's well-being during the pandemic.



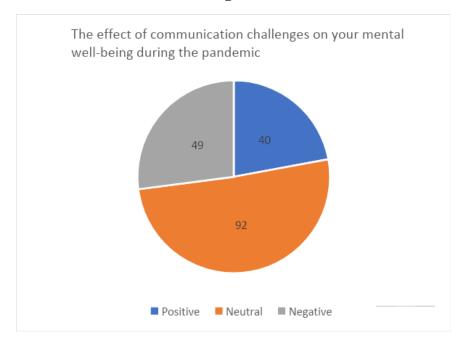
To compliment the chart result, there are several answers taken from the open-ended questions that would explain why teachers in Asia region believed that they have received good support for their state of well-being from schools they worked at. The answers are as follow:

- "We were given training, time and again to meet the challenges and were taught to overcome all the problems and handle the situation as a team."
- "We had regular online meetings to deal with the problems that we were facing."
- "School is quick to provide all the support and infrastructure and training on the tech tools."
- "School has gotten to know what teachers need so they have been trying to support us."
- "Admin were aware and constantly give moral support and encouragement."

Yet, it does not change the fact that there are also teachers in the region who received little to no attention at all from school, and this led to some them feeling abandoned and alone.

- "Students' well-being has more support than employees' to the point that students get a lot of school breaks while employees still push thru with virtual meetings for the betterment of the students."
- "No guidance was offered, we had to deal with online and hybrid teaching all by ourselves. It was hard."
- "They just don't care."
- "They left me alone."
- "School system doesn't care for teachers' well-being at all. Crucial thing is satisfying bureaucratic forms."

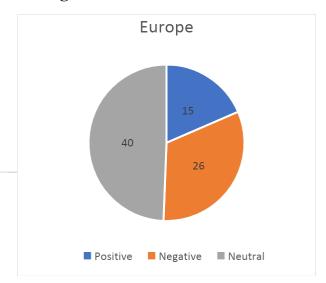
- Effect of communication challenges on teacher's mental well-being

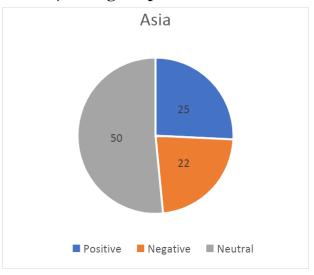


On this part, the survey covers communication challenges and its impact to teachers' well-being during the pandemic. More than half of the teachers (92 out of 181) felt that making communication with colleagues, relatives, and school administration officers do not have significant impact to their mental well-being. In short, their experience is neither good or bad.

The next step of this analysis is to breakdown the survey result based on region and continent of the participants. If we lay out the survey result based on continent, we would later have a clear overview of the effect of communication challenges to teacher well-being during the pandemic in each region.

Interestingly, the result collected from the survey showed a quite homogenous response in which teachers from Europe and Asia experienced neither negative or positive impact to their mental and well-being when encounter communication issues (with colleagues, school administrations, and/or relatives) during the pandemic.





The effect of communication to teacher's mental well-being in Europe and Asia

To understand the situation, here are some responses from the participants regarding their experience on the issue:

- "There have been challenges in communication as when you correspond through emails, WhatsApp or Telegram, many a times other messages flood the inbox and my message gets neglected. But our school administration has tried its best to keep the communication doors open."
- "Communication via email and messenger are helpful but there are also days when receiving a message/email that contains announcements or complaints still gives me much anxiety."
- "Some parents and some teachers communicate each other. Some of them cannot communicate during pandemic."
- "People need to talk. But sometimes because of a huge workload it was difficult to find time for that."

Nonetheless, we cannot neglect the fact that teachers do also encountered positive and negative experience on the issue.

Positive experiences:

- "I didn't feel alone. I kept on interacting with the parents, also during the afternoon, sometimes for longer sessions. I was also able to communicate with students individually, when they needed it."
- "Positive purely because my colleagues and friends from the institution were always there to lend a patient ear."
- "I had a very supportive staff and management. They are always there to hold our hand."
- "The superiors pay attention to the communication among teachers, colleagues, superiors as well as to the parents and students."
- "I had more opportunities to give individual (digital, written) feedback to all the students, more than is usually possible in 50 min classes with 25 students."

Negative Experiences:

- "The pressure parents put on teachers regarding their desired grade for their child was enormous, which didn't come with the pandemic but the pandemic was used as an excuse to attack teachers."
- "Communication is more difficult in general as when people are under stress and dealing with external issues, they may not answer emails and messages."
- "It is difficult to share our thoughts and ideas to the administration because they already have their own decisions."
- "Constantly feeling lonely and boredom being isolated from the normal lifestyle.

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	lesson, the	e students d	on't show	up.			

Appendix 1: Factor Structure of the Quantitative Questionnaire

All these statements were rated on a scale of 1 ("Completely Disagree") to 5 ("Completely Agree")

Factor 1: Support received from schools during COVID-19

- **Item 6:** I received adequate technical support when we shifted to online teaching (e.g. introduction to new tools, tutorials, troubleshooting).
- Item 7: I received adequate support in dealing with the logistical changes that came with online teaching (e.g. balancing online and in-person classes, ensuring that students have access to adequate technology, etc.).
- **Item 8:** I received adequate support in dealing with the educational and pedagogical changes that came with online teaching (e.g. grading, class discipline, plagiarism prevention, student motivation, lesson plans etc.).
- Item 9: I received enough personal support during this time (e.g. counselling, mental health resources).
- **Item 10:** I feel that my school administration has had an empathetic response to the challenges that their staff have faced during online teaching.

Factor 2: Digital Literacy

- **Item 1:** I am able to use web conferencing software (such as Zoom, Google Meet, Skype etc.) to teach.
- Item 2: I can use social media (such as Telegram, Whatsapp etc.) to communicate with my students.
- Item 3: I am able to design online quizzes and polls to assess learning in online classes.
- **Item 4:** I can use Learning Management Systems (for example, Jamboard, Google Classroom, etc.) to supplement my teaching.
- Item 5: I am able to use online discussions for teaching in my classes.

Factor 3: Communication challenges faced during COVID-19 teaching

- **Item 14:** I experienced pressure due to parents' expectations towards me about their child's performance during COVID-19.
- Item 15: I found communication with my colleagues during COVID-19 challenging.
- **Item 16:** I found communication with my superiors (principals, school managers/directors etc.) during COVID-19 challenging.

Factor 4: Ability to communicate during COVID-19

Item 11: I have been able to regularly provide written or verbal feedback to my students during COVID-19.

Item 12: I have had the opportunity to interact with parents about the challenges that their children must be facing, regularly.

Item 13: Parents of my students have played an active role in facilitating learning during COVID-19.

Factor 5: Positive takeaways of COVID-19 on teacher skills

Item 17: The COVID-19 crisis has made me see the importance of implementing a digital curriculum.

Item 18: I believe that high-quality learning experiences can occur without interacting with students face-to-face.

Item 19: I believe that the COVID-19 crisis has helped me develop my digital literacy skills.