#

**PARTNERSHIPS FOR EQUITY AND INCLUSION**

**EDUCATION, GENDER AND FAMILY RELATIONSHIPS IN THE TIME OF COVID-19: KAZAKHSTANI TEACHERS’, PARENTS’ AND STUDENTS’ PERSPECTIVES**

**PILOT PROJECT REPORT**

**AUTHORS**

Naureen Durrani

Janet Helmer

Filiz Polat

Gulmira Qanay

**Date**

April 2021



**Inside cover:**

This report was produced as part of the activities of the [Partnership for Equity and Inclusion](https://medicinehealth.leeds.ac.uk/dir-record/research-projects/1366/partnerships-for-equity-and-inclusion), a collaboration of international research networks aiming to support equitable practice in public service institutions. Findings aim to inform policymakers and practitioners in public services as well as advocacy groups that seek to improve public service access, outcomes and representation for socially excluded populations.

**Research team members**:

Principal investigator:

Prof Naureen Durrani

Co-Investigators:

 Dr Janet Helmer

 Prof Filiz Polat

 Dr Gulmira Qanay

Research Assistants:

Aigul Azhigaliyeva

Nadezhda Ponamareva

Assel Temirbekova

Content

[**List of Tables** i](#_Toc68887973)

[**Abbreviations** ii](#_Toc68887974)

[**Definitions** ii](#_Toc68887975)

[**Executive Summary** iii](#_Toc68887976)

[**Introduction** 1](#_Toc68887977)

[**Education policy context** 1](#_Toc68887978)

[**Gender context** 2](#_Toc68887979)

[**Existing evidence** 3](#_Toc68887980)

[**Research focus and questions** 6](#_Toc68887981)

[**Methods:** 7](#_Toc68887982)

[**Findings:** 9](#_Toc68887983)

[**Education Quality and Equity** 9](#_Toc68887984)

[**1. Distance/online education and widening educational inequities** 9](#_Toc68887985)

[**2. Mitigating inequities in distance/online education** 11](#_Toc68887986)

[**3. Perceptions of distance/online education** 12](#_Toc68887987)

[**4. Student learning and engagement** 14](#_Toc68887988)

[**Wellbeing and Equity** 16](#_Toc68887989)

[**1. Absence of school commute and quality of life** 16](#_Toc68887990)

[**2. Work-life balance** 16](#_Toc68887991)

[**3. Physical wellbeing** 17](#_Toc68887992)

[**4. Psycho-social and mental wellbeing** 18](#_Toc68887993)

[**5. Relationships** 19](#_Toc68887994)

[**6. Financial wellbeing** 21](#_Toc68887995)

[**Conclusion** 22](#_Toc68887996)

[**Recommendations** 24](#_Toc68887997)

[**Policymakers** 24](#_Toc68887998)

[**School leaders** 25](#_Toc68887999)

[**Teachers** 25](#_Toc68888000)

[**References** 26](#_Toc68888001)

#

# **List of Tables**

|  |  |
| --- | --- |
| Table 1. Field sites, methods and the number of participants | 7 |
| Table 2: Percentage distribution of selected socio-demographic characteristics of research participants | 8 |
| Table 3. Percentage distribution of digital infrastructure at home | 11 |

**List of Figures**

|  |  |
| --- | --- |
| Figure 1. Field sites and regional map of Kazakhstan | 7 |

#

# **Abbreviations**

FGDs: Focus Group Discussions

MoES: Ministry of Education and Science the Republic of Kazakhstan

NIS: Nazarbayev Intellectual Schools

SAU: Summative Assessment for the Unit

SAT: Summative Assessment for the Term

UNT: Unified National Testing

# **Definitions**

|  |  |
| --- | --- |
| Distance/online education | In this study, distance/online education are interchangeably to describe the different configurations of education that are taking place due to the disruption of school closure. Taken together they refer to a form of education in which teachers and students are separated geographically for some or all school subjects. Lessons might be delivered synchronously in real-time or asynchronously. Instruction is provided using various technologies such as TV, lesson videos, Zoom, or Microsoft Teams. It might combine in-person teaching with online learning to produce a hybrid model. |
| Homeroom teacher | Each class has one designated homeroom teacher, who holds a wide variety of responsibilities, including students’ academic performance, discipline, and extracurricular activities. Additionally, homeroom teachers commonly help students with academic concerns, career development, and discussing aspects of mental health.  |
| Nazarbayev Intellectual Schools (NIS) | Autonomous schools for gifted students funded by the state |
| Mainstream schools | Schools funded and managed by local, regional and central education authorities |
| Online Mektep | It is a digital educational platform for grades 1-11. It provides academic content in all academic subjects for school students. Teachers can track their students' achievements. Students can check their results there. Its use is optional for schools. |
| Ungraded school | Schools located mainly in rural areas, where there are not enough students to give each age group a class, so students of different age groups are taught together in one class. |
| Unified National Test (UNT) | A high-stakes assessment taken by students who complete 11 years of education. It serves as a school-leaving exam and determines the entry to higher education. |

#

# **Executive Summary**

**Study focus:** This pilot study used a gender lens to investigate the ongoing impact of the COVID-19 pandemic on equitable quality education and the broader wellbeing of three stakeholder groups in Kazakhstan: parents, school children and teachers.

**Research design and methods:** Parents’ and teacher’s views were collected through in-depth individual semi-structured interviews, while students’ perspectives were gathered through focus group discussions. In total, 30 teachers, 30 parents and 28 students participated in the study. Field sites included the capital city, Nur-Sultan, Almaty region and Shymkent. The focus was on mainstream schools (the equivalent of state schools in the UK). However, for a comparative perspective, a small number of teachers and students from Nazarbayev Intellectual Schools (NIS) (schools for gifted students) were also included. The state funds both school types, but mainstream schools are governed by central, regional or local education authorities and are resource-constrained, particularly in rural areas. By contrast, NIS are very well resourced and enjoy academic autonomy.

Findings and recommendations were validated in a stakeholder roundtable convened on March 31st, 2021.

**Limitations**: Stakeholders in very remote rural villages are arguably more marginalised but could not be accessed because of the study's short time frame, poor internet in rural areas and quarantine measures. Additionally, the study could only include one parent who had a child with a learning disability. Because of the social stigma associated with disability, accessing people with disabilities in Kazakhstan is challenging. The quarantine measures made it even more challenging to access this particular sub-group. Finally, the vast majority of recruited parents had post-secondary education. Less-educated parents find it harder to homeschool their children and are more likely to be working away from home, making juggling work and homeschooling extremely challenging.

**Findings:** Access to quality education and participants’ broader wellbeing were negatively impacted. These impacts were unevenly distributed across and within groups.

**Quality of education and equity**

1. ***Distance/online education and widening educational inequities:*** The abrupt transition to distance/online education widened the existing gaps between NIS and mainstream schools and between rural and urban schools. NIS teachers and students found the transition much smoother because of meticulous planning, prompt teacher capacity development, quick distribution of digital devices, and extensive IT support provided to students and teachers. By contrast, mainstream schools, particularly those in rural areas, completed the school year learning how to do distance/online education on the go. Mainstream teachers, particularly those more mature, found the transition and learning to teach using digital technology extremely challenging. Similarly, while all parents found the shift to distance/online education hard, the difficulties were profound for low-income families, parents with limited educational resources and digital connectivity, working parents, single mothers, parents with many children, parents in rural areas and parents with children in primary grades.

***2.*** **Mitigating inequities in distance/online education:** The long summer break enabled educational authorities to ensure subscription to e-platforms, support teachers through professional development and distribute digital devices to teachers and students from low-income families and families with many children. The Regional Methodology Offices developed a bank of video lessons however, teachers have questioned the quality of the video lessons.

**3. Perceptions of distance/online education:** While urban mainstream teachers’ perceptions of the quality of distance/online education have improved over time, parental perceptions remain mainly negative. Unstable internet connection and the short duration of lessons (20 minutes) prevented teachers from providing interactive virtual lessons thus making it harder to cover the curriculum. An additional issue for mainstream teachers was a misalignment between the work plan on the school preferred digital platform and teachers’ actual lesson plans. Supporting primary school children remained difficult both for parents and teachers. Students transitioning from primary to secondary school had to navigate the challenges of distance/online education in a new school environment with little knowledge of available support structures. The teaching and learning of specific subjects, namely physics, chemistry, biology, mathematics and physical education was believed to be much more challenging in the distance learning environment.

**4. Student learning and engagement:** No reliable data exist on student learning. This knowledge is pivotal to offer remedial teaching. Parents complete assessment tasks for children, and many students now collude and plagiarise. Formative assessment was not taken seriously because there was no penalty for skipping it. Some stakeholders believed that learning and engagement have decreased. This was especially true for low achievers. It was suggested that those students who are in the upper grades may never return to school. Shy and introverted students were another category of students who teachers characterised as struggling. With few exceptions, students across the board reported a loss of concentration and motivation to learn.

**Wellbeing and equity**

**1. Absence of school commute and quality of life:** The absence of school commute, particularly in the harsh winter climate, was reported as a positive by all stakeholders, particularly urban dwellers. It reduced stress, and resulted in more time to spend with family and monetary savings.

**2. Work-life balance:** All stakeholders’ work-life balance has been negatively impacted by distance/online education. Students are overwhelmed by what is viewed as an increased amount of school work, while some adolescent girls now have to contribute to household chores throughout the school day. Parents have to juggle work, homeschooling and managing multiple school related chat groups. Likewise, teachers have to handle numerous chat groups with students, parents, peers and school administration. In addition to recording lesson videos, they have to call parents when children fail to turn up for lessons. Female teachers have to homeschool their own children, do domestic chores and manage a heavy workload.

**3. Physical wellbeing:** The increased workload negatively impacted the physical health of all stakeholders. Acute backache, headaches, declining eyesight and gaining extra weight were some of the reported challenges as life has become much more sedentary.

**4. Psycho-social and mental wellbeing:** The fear of catching COVID-19, seeing neighbours and relatives dying of COVID-19 greatly impacted the psychological and mental wellbeing of the participants. This fear was much stronger at the beginning of the pandemic. Social isolation was felt strongly by those who adhered stringently to government regulations regarding quarantine measures. Participants believed governmental communication about COVID-19 could have been more effective and transparent. In a similar vein, participants indicate that there is a lack of information about the vaccination and its potential impact on their health and hence, some feel rather sceptical about it.

**5. Relationships:** Distance/online education has negatively impacted family relationships, relationships between parents and teachers and relationships between school leaders and teachers.

**6. Financial wellbeing:** Teachers’ income has not been directly affected by the pandemic. They have been paid on time and have received a pay rise. The direct economic impact on parents varies according to the sector of the economy. However, both teachers and parents incur costs for Wi-Fi bills, and some have bought digital devices on credit. Because of the actual or perceived low quality of education in the distance/online mode, some parents feel compelled or are encouraged by teachers to buy paid tuition, forcing some stay home mothers to seek paid work to finance paying for extra tuition.

**Conclusion**

Intersecting markers of inequality—rurality, poverty, digital exclusion, level of education/ grade, age, occupational status, family type and gender—have widened gaps in access to quality education and negatively impacted stakeholders’ broader wellbeing. Gender intersects with other markers of inequality, compounding female stakeholders’ disadvantage. Mothers are doing homeschooling. Most teachers are women and mothers and carry a double burden. Adolescent girls are expected to do household chores. Educational equity and supporting the psycho-social and educational wellbeing of stakeholders need to be a top priority of any short- and long-term policy interventions to mitigate the impact of COVID-19 and build back a better education system.

**Recommendations for Policymakers**

***1. Return to school.*** Ensuring the upscaling of COVID-19 vaccines to the general population, including teachers, is pivotal for sustainable on-site schooling.

***2. Gender equity*:** Integrate an intentional gender lens in policy measures to mitigate the impact of COVID-19 on women. UNESCO (2020e, 21) stresses ‘transforming the inequities of unpaid care work into a new, inclusive care economy that works for everyone.’

***3. Digital equity:*** Investment in expanding access to a stable Internet connection, particularly in rural areas, is necessary for equitable quality education. More investment in digital devices is needed for both teachers and students to stimulate educational equity.

***4. Redistribution:*** Building back a better education system will require redistributing educational funding and resources to disadvantaged schools and marginalised learners.

**5.** ***Shifting attitudes towards assessment:*** There is a need to differentiate between learning and assessment and use the latter to promote learning and teaching. Such a shift would require giving more weightage to formative assessment and de-emphasising the role of high-stakes assessment.

**6. Assessing digitally:** Educational technology could support the development of assessment approaches resistant to cheating, collusion and plagiarism. Teachers’ capacity in constructing assessment tasks suitable for distance/online education needs to be developed.

***7. Assess the quality of the video lessons bank:*** The quality of video lessons collected by regional methodological offices needs to be assessed to save teachers’ time and effort.

**8*. Reconsider the lesson duration:*** While well-intended, the 20 minutes lesson duration negatively impacts curriculum coverage and instruction.

***9. Training for parents:*** Training programmes for parents on effective remote learning at home would strengthen family wellbeing and support effective distance/online education.

***10. Digital literacy in pre-service training:*** Pre-service training programmes need to embed digital literacy and competency in their curricula to ensure student-teachers are prepared to teach in the distance mode.

**11. *Communication about COVID-19 regulations:*** Regular, transparent and effective government communication in the context of the pandemic would build trust between education stakeholders and the government alleviating stakeholder stress.

**Recommendations for school leaders**

***1.* Psycho-social needs of both students and teachers:** Include a strategy for supporting the psycho-social needs of both students and teachers in the schools’ short and long-term recovery plan.

***2. Teacher autonomy:*** Giving teachers autonomy to choose the digital platforms that work best for them and their students would reduce teacher workload and further support effective learning.

**3. *Align the school work plan in Online Mektep to teachers’ actual teaching plans*:** This will eliminate confusion and ensure students do not miss out on course content.

***4. Continue supporting teachers’ professional development:*** Teachers’ digital competence needs to be developed regularly.

***5. Teacher collaboration:*** Regular online teacher meetings for sharing ideas and planning together aids professional development and helps combating social isolation.

***6. Parental support:*** Some parents need both technical and educational support to tackle issues related to the digital divide. Parents who have children with a disability need additional help from professionals.

***7. Improving parent-teacher relationship****:* Sustaining regular and clear communication with parents about curricular and extracurricular issues and what the school expects from parents will aid preventing conflicts between parents and teachers.

**Recommendations for teachers**

***1. Expectations from parents and understanding family situations:*** Teachers need to understand that the parents’ role is to make sure their kids attend their lessons, are awake, and pay attention. While it is the teachers’ role to plan and provide effective instruction. Some families might be experiencing significant challenges therefore needing differentiated support.

***2. Provide supportive pedagogies:*** Supportive pedagogies can sustain students’ motivation and interest. Teachers can help students by giving clear instructions and guidance on managing time and staying focused in the face of distractions, using multiple ways of checking the learning progress and providing structured support while also giving flexibility. A first step is to prepare students to take responsibility for their learning. Providing emotional support is particularly relevant in emergency situations (Yates et al., 2020).

***3. Peer-learning:*** Peer learning is highly effective as learner’s find it easier to approach one another for help. Working collaboratively to produce educational products is enjoyable and promotes teamwork. Greater use of pair- and group-work will reduce reliance on parents and help combat social isolation.

***4. Assessment:*** Uselow-stakes assessment to get a clear picture of student learning and identify those who need remedial teaching. When using high-stakes assessment, give clear instructions about the task and the assessment criteria. Use a variety of tasks and give adequate time for completing assignments. Providing timely feedback to students and parents will enhance student learning and motivation, and prevent parental discontent.

***5. Keep students’ workload manageable:*** Subject teachers can liaise with one another and the homeroom teacher to prevent overwhelming learners with school related tasks.

**Introduction:**

According to UNESCO’s estimates, at one point, globally, 80% of children and 60% of teachers were home due to school closures (UNESCO 2020a). One year into the pandemic, more than 50% of the global student population (over 800 million students) still experience substantial disruptions to their education, with full school closures reported in around 31 countries and reduced or part-time academic schedules in another 48 countries (UNESCO, 2021). In Kazakhstan, students, parents and teachers were likewise affected by the COVID-19 pandemic. In Kazakhstan, the pandemic has disrupted education, and there is a growing concern that school closures will exacerbate existing inequalities in education. Therefore, this pilot study investigated how the COVID-19 pandemic impacted the delivery of equitable education in Kazakhstan through foregrounding parents’, teachers’ and school students’ voices. Through the use of a gender lens, the interest was in the ongoing impact of the pandemic on the broader wellbeing of stakeholders.

The discussion below first explicates the education policy context in Kazakhstan with a focus on markers of inequalities. Next, gender issues are situated in the cultural, social, economic and political context of the country. A review of the emerging literature on educational disparities in the context of the pandemic then follows. Finally, the research focus and questions of the current study are outlined.

## **Education policy context**

Kazakhstan is a post-Soviet state, ‘with 88% of its territory located in Asia and 12% sitting in the European landmass’ (Gimranova et al., 2021, 405). The country’s geography and population density have implications for education service delivery. With a huge landmass, equivalent to the size of Western Europe (2.7 million km2) and a population of only 18.5 million, which was estimated in July 2017 (CIA, 2018, cited in Gimranova et al., 2021), the population density across the country is very low (6.5 people per km2) but uneven across rural and urban areas in the far northern and southern parts of the country which are more densely populated.

Since its independence in 1991, the country has embarked upon an extensive programme of educational reforms to advance human capital development, economic growth and the modernisation and internationalisation of the country (Bridges, 2014). The Ministry of Education and Science (MoES) of the Republic of Kazakhstan is responsible for strategic planning and funding of education; preparing draft education budgets; establishing national guidelines and standards, curricula and syllabi and preparing state orders concerning the training of specialists (Gimranova, 2021). The remit of MoES extends to ‘the governance and inter-sector coordination of science, the protection of children’s rights and youth policy’ (Gimranova et al., 2021, p. 414). The school education service is delivered through the country’s regional structure which comprises 14 provinces (*oblystar*) and the three large cities of Almaty, Nur-Sultan and Shymkent. The regions are further divided into districts (*audandar*). Provinces and districts have to comply with central government policies (Gimranova et al., 2021).

The national education system comprises:

1. pre-primary education;
2. School education which consists of primary (Grades 1-4), basic (lower) secondary (Grades 5-9) and upper (general or vocational) secondary education (Grades 10-11/12); and
3. Higher education which includes post-secondary and tertiary (graduate and
4. postgraduate) education

The current study focuses on school education which is free and provided mainly by public mainstream schools. A considerable proportion (57%) of the public primary and secondary schools in Kazakhstan are ungraded, which are predominantly located in rural areas where population density is very low (OECD, 2014, cited in Gimranova, 2021). In addition, there exists a small network of highly resourced schools for the gifted, the Nazarbayev Intellectual Schools (NIS). NIS enjoy full autonomy and receive considerably higher funding. NIS currently enrols only 0.4% of all Kazakhstani students but at a unit cost of more than three times the national average (OECD, 2015; cited in Karabassova, 2021).

Educational inequalities in Kazakhstan can be traced to ability, region, location (rural vs. urban) and the medium of instruction. Marteau’s analysis (2020) suggests the loss of learning resulting from school closures due to the COVID-19 pandemic is expected to hit hard the ones who are already educationally vulnerable. The NIS students outperform their peers by 124 PISA points, equating to almost three years of schooling (Marteau, 2020). Regionally, disparities in education are linked to an uneven landscape of human capital development in Kazakhstan. For example, income inequality is four times more between the high and low performing regions. PISA outcomes indicate that on average, low-performing regions are four years of schooling behind high-performing regions (Marteau, 2020). National and international evidence suggests that students attending ungraded schools perform worse (Gimranova et al., 2021).

Kazakhstan’s language policy recognises the language rights of all ethnic groups. Nursultan Nazarbayev, Kazakhstan’s First President issued a decree on trilingual education in 2007, which stipulates that all schools teach three languages, Kazakh, Russian and English. The trilingual policy originated in NIS but has been now rolled out to mainstream schools. PISA results indicate that ‘Russian-speaking students outperform their Kazakh-speaking peers in all three tested subjects’ (OECD, 2014, cited in Gimranova et al., 2021, p. 417). With the trilingual policy now being rolled out in mainstream schools, over the long term, English will emerge as another axis of discrepancy in learning outcomes as the schools' capacity to effectively implement the policy differ immensely.

In Kazakhstan, the inclusion of children with any kind of physical or cognitive difference into the mainstream school system has only recently been considered as part of the educational agenda (Allan and Omarova, 2020). Lack of acceptance towards difference can be traced back to the post-Soviet legacy where children with any disability were sent to separate schools and taught by defectologists, a system still operational in contemporary Kazakhstan. The shifting of education into the online space has further marginalised this group of students (UNICEF, 2020).

On a positive note, when taken in isolation, being a girl or a woman is not associated with a disadvantage in educational access or learning outcomes. Kazakhstan has achieved gender parity in access to schooling, and females are overrepresented in higher education. Gender-segregated international assessment data indicate that Kazakhstani girls outperform boys in science (Almukhambetova and Kuzhabekova, 2020) and reading and are on par with them in mathematics (UNESCO, 2020b, 68). Despite their learning outcomes in science and mathematics, female tertiary graduates are underrepresented in ICT (30%) and Engineering (28%) (UNESCO, 2020b, 68). Furthermore, women continue to be overrepresented (over 70%) in feminised occupations such as teaching and health.

## **Gender context**

Although the Soviet Union promoted women’s equality in Central Asia, both in education and the economy (Kataeva and DeYoung, 2017), gender equality in the domestic sphere, public institutions, or political participation lagged behind, and gender roles showed little change (Palandjian et al., 2018). Post-independence, Kazakhstan has shown sustained commitment to international gender equality policies and has made visible efforts to advance women’s status (Almukhambetova and Kuzhabekova, 2020). However, post-socialist nation-building in Kazakhstan draws on gendered nationalism to actively produce the traditional, social hierarchical or patriarchal order (Palandjian et al., 2018). On the one hand, Kazakhstan’s neoliberal social and economic reforms push women to assume an active role in the economic sphere. On the other hand, the nationalist narrative constructs women’s double burden as workers and mothers during the Soviet period as ‘unnatural” and “oppressive”, implying that women could choose to return to the domestic sphere even whilst this remains unaffordable for a vast majority of women.

Despite higher education levels compared to their male counterparts, Kazakhstani working women are concentrated in the feminised sectors, mainly education and health, where average wages are lower than in other sectors: in 2019, the average monthly salary in Kazakhstan was 186,815 KZT, while the monthly average wage in education and healthcare was 32.5% and 28.5% lower respectively (Agency of the Republic of Kazakhstan on statistics, 2021). Although 76% of teachers are female, only 53% of school leaders are women, suggesting a significant disparity in the likelihood of a woman’s promotion to a school leadership position (OECD, 2019). Kazakhstani women spend considerably more time than men in unpaid household and care work. A significant proportion of women (40%) have seen an increase in the time spent on care/domestic labour during the pandemic (UN Women and UNFPA, 2020). Furthermore, with one in three women experiencing physical, sexual or some form of violence, gender-based violence continues to pose significant barriers to women’s socioeconomic outcomes (OECD, 2017). Despite high literacy rates in Kazakhstan, the social acceptance of intimate partner violence among both women (64%) and men (74%) is high (UNDP, 2020).

The feminisation of the teaching workforce in Kazakhstan and the social expectations of women’s centrality to caring and nurturing has had profound implication for gender and family relations. This situation is even more profound with the shifting of school to home. Hence, the current study is both warranted and timely.

## **Existing evidence**

The current health pandemic is unprecedented in its scale, with devastating short and long term multidimensional impacts on the economy, society and education. The COVID-19 pandemic has affected everyone, however, its effect is being experienced differently by various social groups. In many ways, the pandemic has extenuated existing socioeconomic, health and educational inequities.

At one point, 188 countries had imposed countrywide school closures, affecting more than 1.5 billion children and youth (UNESCO, 2020c). Similar to the global evidence, the pandemic has disrupted education in Kazakhstan. A chronology of how MoES responded to the fluid pandemic situation in the country is presented below:

* The government closed all schools on **March 12th 2020**, one week ahead of the scheduled spring vacation (Ogurtsov, 2020).
* **From April 6th till May 25th 2020** (the end of the 2019-2020 academic year), schools were fully closed, and students of all grades studied online. The school closure was sudden, and schools only had three weeks to prepare for distance/online learning (Aimagambetov, 2020a, 2020b).
* Between **June and August, 2020** schools were closed for the annual summer break. This long break enabled MoES to prepare for the new academic year 2020-2021 (MoES, 2020a), provide teachers with professional development on distance learning (MoES, 2020b) and offer parents and students informational support on how education would be organised in the new academic year (MoES, 2020c).
* Between **September 2020 and March 2021**, schools were partially open. The majority of students (2.6/3.3 million) started the new school year via distance/online learning. During this period, schools, teachers, students, and parents were better prepared and more experienced in distance/online learning. Depending on each region’s situation, the Ministry of Education and Science allowed three thousand schools, mainly in rural locations, to fully open (MoES, 2020d). Primary schools provided parents with an option to study at home or start schooling in small groups of 15 students. About 60% of primary children chose the latter option (MoES, 2020d). Later on, this option was extended to 5th-grade students (MoES, 2020e). Grades 6, 7, 8 and 10 were taught distantly. Graduating high school students (9, 11 (12) grades) were taught via a combined mode, with around 70% of subjects taught at schools and 30% distantly (MoES, 2021a).
* From **March 2021** in Kazakhstan, the situation with COVID 19 was announced as stable, although infection rates have surged again, and three regions—Almaty, Nur-Sultan and West Kazakhstan—were declared to be in the red zone on March 21st 2021 (<https://www.inform.kz/en/kazakhstan-s-3-areas-in-red-zone-for-coronavirus_a3767303>). Vice-minister of Education and Science, Karinova (2021), announced that primary schools and 5th grades have shifted to combined learning. International schools have combined learning for primary grades and middle school grades from 5 to 7. Overall, all primary grade students, 5th grades, and final graduating year students (9, 11(12) grades) had access to schools. Besides, students of other grades 6, 7, 8 and 10, who were studying distantly, were provided with the possibility to attend individual learning at school in small groups outside the regular school timetable if they needed more help.

While the pandemic continues to profoundly reshape education delivery worldwide, its short and long term impacts are not equal for all schools, parents, teachers and students. The pandemic’s unequal multidimensional impacts on students, parents and teachers are synthesised below.

***Impact on students***

School closures have disproportionately affected children who are already disadvantaged (UNESCO, 2020c). Adolescents in low-income families may be required to work to contribute to the declining income of their families, making the return to school harder after the reopening of schools. School dropouts and widening gender and socioeconomic disparity were attributed to school closures during the Ebola crisis (UNESCO, 2020a).

The loss of instructional time may have long term negative impacts on learning. Researchers from the London School of Economics have estimated that a four-week (20 days) closure could translate to ‘moving a middle-ranking child down to the bottom 30% of children’ (Eyles et al., 2020, p. 3). Substantial learning loss can negatively impact school retention and progression when schools reopen after extended closure (USAID, 2020). Attending school provides far more than academic learning. For many students from poor or dysfunctional families, the school offers a safe haven (Armitage and Nellums, 2020). School closures mean many children from disadvantaged backgrounds are no longer getting regular meals or receiving health checks or immunisation. Long school closure can adversely impact children’s physical, mental and social health and wellbeing, as school meals end, children are left unsupervised at home and interactions with peer groups are lost. Some children might be forced to witness a family member’s abuse or be a direct victim of adult abuse. Working long hours online also increases the risk of online abuse.

The long term impact of school closure can be particularly severe for children from rural and marginalised backgrounds. In these contexts, access to technology and distance learning is limited, and so are opportunities for learning outside schools (USAID, 2020). Even before the COVID-19 pandemic, almost one-third of the world’s young people were already digitally excluded (UNESCO, 2020c). Parents with limited education, time and learning resources may struggle to homeschool their children. With online/distance learning, the education of children with disabilities has become completely invisible with little attention even being considered for this already marginalised group of students (Wijesinghe, 2020). Working online has been particularly challenging for those with special educational needs. Students who have identified special needs in many cases find it challenging now they are no longer receiving one-to-one teacher support with remote education (Montacute, 2020). Additional support services such as speech or other therapies which were provided at school are no longer available. Students with challenges often find it impossible to independently engage in online learning technologies. Kovyazina, Boranbay, and Beysembayev’s (2020) study in Kazakhstan identified that children with special educational needs were in the most vulnerable position because of distance/online education. Since most TV lessons were developed for able-bodied children, hearing-impaired and blind children excluded from the learning process. Most online courses did not cater to their individual needs. Refugee and internally displaced children and those living in detention and situations of active conflict are also especially vulnerable (UNESCO, 2020c).

School closures and social isolation measures also have had an adverse impact on student motivation. Over 43.6% of responding parents in Kazakhstan expressed that the state of lockdown and social isolation measures have had a negative effect on their children’s motivation for learning (Bokayev et al., 2021a). Although the study did not identify which category of parents expressed a greater negative impact on children’s motivation, Bokayev et al. (2021a) speculated that families showing greater adherence to social isolation rules might see a more significant negative effect as a result of minimal to no human contact outside the home. By contrast, families who ‘allow their children out to socialise may be better at preserving their motivation, but at the expense of public health’ (Bokayev et al., 2021a, 9).

***Impact on Parents***

Single-parent households are particularly at risk of losing income if it is necessary for the parent to stay at home to educate their children (USAID, 2020). Such families are often, though not exclusively, low-income. Parents, including teachers, are juggling to balance housework, professional work, and managing their emotions. Parents have been inundated with a proliferation of resources, ideas and content to engage and educate their children. However, this adds to their anxiety involved in determining which resources to choose and how to use these resources. Homeschooling is expected to disproportionately impact working/single mothers, those with low-income and precarious livelihoods, parents with disabilities and parents who have children with disabilities. A survey in the United States reported that parents of children under age 18 are disproportionately likely to say their lives have been disrupted by the pandemic (Hamel et al., 2020).

While digital connectivity is pivotal to educating children during school closure, a digital divide, mirroring broader social inequalities, exists both across and within countries (OECD 2015). In 2012, the percentage of students who had at least one computer at home in Kazakhstan was 68.1 and those who had three or more computers at home was only 2.4% (OECD, 2015, 19). The percentage of children from disadvantaged households who had access to the Internet at home in Kazakhstan was 19.4% (OECD, 2015, 24-25). While in Kazakhstan, Internet access is a common element of city life, this is not the case in locations further outside of city limits.

A study investigating parental satisfaction with online/distance learning in the times of COVID-19 in Kazakhstan reported that 78% of families primarily use a smartphone ‘as their only access point to online material’ and 34.4% of responding parents indicated that they face the problem of a weak Internet connection, and 13.9% expressed they lacked time while 9.9% felt they don’t possess sufficient knowledge to support their children’s learning, (Bokayev et al., 2021a, 6). However, parents with higher incomes expressed greater satisfaction with online learning, while having more children was associated with decreasing parental satisfaction with the quality of distance/online education. Parents’ capacity to homeschool their children depends on the number and age of the child/children (Bokayev et al., 2021a).

***Impacts on teachers***

With no preparation, teachers have been tasked with continuing the learning process of their students via distance learning. In Kazakhstan, teachers have been advised to use free programmes such as Microsoft Teams, Google Classroom, and ZOOM as well as local platforms such as Online Mektep, Kundelik, Daryn Online and BilimLand. They have been encouraged to offer pre-recorded video classes, online classes and other online means of communication. This assumes that the teacher has both technology and internet access at home and the skills to support their students using a whole different medium to meet the learning goals and objectives of the subject matter they teach. Helmer et al. (2018) in a study of teachers’ technology use in Northern Australia, found even those teachers who grew up with computers had only basic levels of technology such as word-processing skills or sending email and text messages. A study in northern Kazakhstan on teacher technology integration reported that for rural locations, Internet access is both very slow and poor to the point many see it as more of a hindrance to learning than an advantage (Kurmangaliyev, 2019). The teachers and students in this northern region struggled to use digital technologies in their everyday learning implying this pandemic has only further exacerbated educational inequalities.

Female teachers with children have to simultaneously educate their own children and teach the nation’s children whilst also fulfilling their other domestic responsibilities. A study of Kazakhstani teachers’ perspectives on distance/online education indicated that teachers’ workload has increased, lowering their motivation and impacting their physical and mental health (Kovyazina, Boranbay and Beysembayev, 2020).

## **Research focus and questions**

This study investigates the impact of COVID-19 on equitable education in Kazakhstan by foregrounding parents’, teachers’ and students’ voices and experiences. Because gender matters in emergencies (UNESCO, 2006), the study explores the ongoing impact of the pandemic on stakeholders’ overall health wellbeing through a gender lens. The lockdown measures and online/distance learning introduced by the Government of Kazakhstan, while necessary to curtail the spread of the COVID-9, are expected to amplify social, health, economic, gender and educational disadvantage. A key concern is the disproportionately adverse impact of the pandemic on marginalised groups, which will widen existing social inequities such as gender, socioeconomic status, location (rural vs urban), ability, family status, and digital connectivity. This study has a dual focus on the school and family as these are the key institutions with responsibilities for children and young people’s learning and wellbeing. While there are differences between distance and online education (Bokayev et al**,** 2021a), in the current study we are using the two terms together to take account of the different configurations of education that are taking place due to the disruption of school closures. The specific research questions include:

1. How do parent(s) from different social backgrounds, geographical locations, family types, and employment situations experience juggling work and life while supporting their children’s education? How are these experiences gendered?
2. What are teachers’ experiences of distance/online learning? How are teachers’ experiences differentiated across grades and subjects, school types, rural vs urban location, gender and family status?
3. How have learners experienced learning during school closure? What challenges have they faced, and what support may be needed in the short and long term?
4. What has been the differentiated impact of school closure on families’ and teachers’ wellbeing?
5. How have quarantine measures impacted parents’, teachers’, and children’s overall health and health maintenance?

# **Methods:**

**Design and methods**

The study used a qualitative research design to investigate the impact of COVID-19 on equitable education and the overall health and wellbeing of parents, teachers and students in Kazakhstan. Individual in-depth semi-structured interviews were used to gather teachers’ and parents’ views and experiences. Focus group discussions (FGDs) were used to gather insights from students. All participant groups filled in an anonymous bio-sheet to help the team identify the groups who have been the most disadvantaged by the adverse impact of COVID-19 and therefore need support.

Data collection took place between December 15th, 2020 and February 15th, 2021. In total, 30 parents, 30 teachers and 28 students participated in the study (see Table 1). A majority of the data were collected virtually. Only five teachers’ and ten parents’ interviews took place in person. All FGDs were conducted virtually.

|  |
| --- |
| Table 1. Field sites, methods and the number of participants |
|  | **Teachers**Interviewsvirtual (in-person) | **Parents**Interviewsvirtual (in-person) | **Students**FGDs | **Total**Stakeholders |
| Almaty Region  | 10 | 10 | 8 (2 FDGs) | 28 |
| Nur-Sultan | 9(1) | 8(2) | 10 (2FDGs) | 30 |
| Shymkent | 6(4) | 2(8) | 10 (2 FDGs) | 30 |
| Total | 25(5) | 20(10) | 28 (6 FDGs) | 88 |

**Participants and research sites**

Participants were recruited from three regions of Kazakhstan: the capital city, Nur-Sultan, Almaty region located in the southeast and Shymkent, one of three Kazakhstani cities which have a status equal to a region, located in south-central Kazakhstan (See Figure 1).



Source: <https://www.worldatlas.com/maps/kazakhstan>

Note: Astana was renamed ‘Nur-Sultan’ in 2019

**Figure 1. Field Sites and regional map of Kazakhstan**

Within each region, the focus was on schools catering to marginalised populations and mainstream schools. However, for a comparative perspective, a small number of teachers and students from NIS were also included. Selected socio-demographic characteristics of the participants are summarised in Table 2.

|  |
| --- |
| Table 2: Percentage distribution of selected socio-demographic characteristics of research participants |
|  | **Teachers** | **Students** | **Parents** |
| Gender |  |  |  |
| Female | 87  | 57  | 97 |
| Male | 13  | 43  | 3 |
| Family status |
| Single | 7  | - | - |
| Single parent | 20  | 21 | 40 |
| Nuclear family  | 60  | 57 | 43 |
| Extended family | 10  | 21 | 17 |
| Married with no children | 3  | - | - |
| School type |
| Mainstream | 83 | 86 | - |
| NIS | 17 | 14 | - |
| Location |
| Urban | 40  | 43 | 47 |
| Semi-urban | 20  | 39 | 43 |
| Rural | 40  | 18 | 10 |

An overwhelming majority of teachers (87%) were women, as expected, since the teaching workforce is feminised in Kazakhstan. The vast majority of teachers (90%) were also parents; 23% had one child, 30% had two children, and 37% of teachers had between three to five children. By contrast, 23% of parents had one child, 23% had two children, and 54% had between three to six children.

**Data processing and analysis**

Interviews and FGDS took place in Kazakh or Russian. Three multilingual school teachers were recruited as research assistants. They collected data and maintained a reflective field diary. With the consent of participants, all interviews were audio-recorded and transcribed and translated into English for analysis. Given the short duration of the project, data were transcribed and translated in parallel with data collection.

The bio-sheet data were entered into SPSS for analysis. The four authors initially analysed a sample of interviews individually to identify emerging codes. These codes were shared, discussed and agreed upon. Afterwards, data transcripts were distributed across the authors for analysis. Team discussions on analysis resulted in the identification of the main and sub-themes.

The interview extracts presented in the next section use the unique code given to each participant to protect their anonymity and confidentiality. The first letter of the code signifies the stakeholder group, e.g. ‘P’ for parents, ‘T’ for teachers and ‘S’ for students. The second letter (and third letter, if applicable) indicates the location of the field site. For example, ‘AR’ is used for Almaty Region, ‘N’ is used for Nur-Sultan and ‘S’ for Shymkent. In the case of parents and teachers, the number indicates the number assigned to the participant. For example, PN6 indicates the 6th parent interviewed in Nur-Sultan, TAR5 means the 5th teacher interviewed in the Almaty region. In students’ case, the first number immediately after the letter indicates whether the quote comes from FGD1 or 2. The number following the underscore sign shows the number assigned to the student in a particular FGD. For example, FGD2\_3 indicates student 3 who participated in FGD2 in Shymkent and SN1\_4 similarly means student 4 who participated in FGD1 in Nur-Sultan.

**Stakeholders’ validation**

A stakeholder roundtable was convened on March 31st, 2021. Research findings and recommendations were shared with an invited group of stakeholders, including representatives of parents, teachers, school leaders, MoES, multilateral organisations, NGOs focusing on supporting marginalised children and researchers undertaking empirical research on the impact of COVID-19 on education. Discussions and feedback indicated that research findings resonated with the experiences of the roundtable attendees. The recommendations offered have been enriched with stakeholders’ feedback, research participants and the literature available.

**Limitations**

This study was conducted within a short time with quarantine measures in place and school closures. Both have constrained our ability to reach out to the most marginalised. While a substantial proportion of stakeholders from rural and semi-urban areas have been accessed in this study, such locations were within the three largest cities. There are remote rural villages in Kazakhstan hundreds of miles away from the city. Schools in such areas are arguably more marginalised and harder to reach. Stakeholders in such locations are challenging to access virtually. While it is hard to make generalisations from a pilot study with a qualitative design, logical inferences are possible. It would be safe, for example, to conclude that the impact of school closures on stakeholders in remote rural areas would be many times more glaring than the picture that has emerged from the current study. Secondly, the study only included one parent with a disabled child, and no parent or teacher participant had a disability. Because of social stigma, it is hard to access people with disabilities in Kazakhstan (Allan and Omarova, 2020). Still, the pandemic made accessing this particular sub-group even more challenging.

# **Findings:**

The analysis of all data sets identified that school closures had negatively impacted both equitable access to quality education and stakeholders’ broader wellbeing, with adverse effects unevenly distributed.

## **Education Quality and Equity**

Four themes emerged with the analysis focusing on how the pandemic has impacted the equitable access to quality education: 1) the transition to distance/online education and the widening of educational inequities; 2) the ways education authorities and teachers sought to mitigate inequities during school closure; 3) perceptions of the quality of distance/online education; and 4) how student learning and engagement was impacted.

### **1. Distance/online education and widening educational inequities**

The transition to distance/online education exposed and extenuated existing educational inequities. Pre-existing inequality in educational quality shaped how different schools responded to the abrupt move to distance/online education and how each stakeholder experienced transitioning to the distance learning mode in April 2020.

The more privileged NIS prepared promptly within the three weeks of the extended 2020 spring break. Already digitally competent NIS teachers were offered online training to effectively teach and support students’ online learning. Schools distributed laptops, computers and Wi-Fi routers to teachers and students and pre-paid Wi-Fi cards to students. IT specialists supported teachers and students to troubleshoot IT problems. Schools regularly sought feedback from parents and students through online surveys. Using this feedback, school leaders and teachers collaboratively took decisions regarding how to improve the online learning environment and accommodate students’ needs. NIS teachers received structured guidelines in the form of a checklist.

*And the methodological support, namely, to ensure the learning process - everything was provided at a very high level. Any questions were always discussed. And, both the school’s IT service and informatics teachers are ready to help in solving any problems at any time. (TAR4, NIS teacher)*

By contrast, mainstream school teachers’ accounts illustrated a somewhat chaotic transition at the level of school organisation. Many schools subscribed to online platforms such as Microsoft Teams or Online Mektep much later. Several mainstream teachers talked about a lack of structured guidance. Many mainstream teachers felt entirely on their own without any institutional support:

*in the beginning … they told us, “Please, create your own conditions”. As for this case, someone has a laptop, someone has a computer, but someone does not have anything*. (TN5)

Mainstream school teachers narrated stories of a steep learning curve with becoming digitally competent and feeling confident to teach effectively in the distance mode. Some teachers mentioned they did not know much about computers before the school shutdown. Even when the school had given them access to an online platform such as Online Mektep they could not navigate it effectively, forcing them to rely on WhatsApp. The learning curve was particularly tough for older and rural teachers:

*And many teachers, probably my peers that are over 40 probably, we faced difficulties like that. We didn’t know what this “Zoom” was. It was very difficult. I prefer not to remember that time, how difficult it was. (TAR6)*

Given that the average age of a Kazakhstani teacher is 41 years (Irsaliyev et al., 2019), arguably, many teachers would have similarly struggled. The majority of teachers (65%) in Kazakhstan are over 34 years old, with 12% (N = 34,439) teachers of pre-retirement and retirement age (Irsaliyev et al., 2019).

The transition to distance/online mode was challenging for all parents but particularly hard for low-income families, parents with limited educational resources and digital connectivity, working parents, single mothers, parents with several children, those living in rural areas and those with children in primary school.

*Since we had primary school pupils, they needed adults’ help in the beginning. And in our area [a rural district in Nur-Sultan city, far from the city centre] there are parents with extremely low social status; the whole family lives in one room. It was exceedingly difficult for them as they eat, sleep, and live in the same room. And those parents have an average level of education; it was too difficult for them to work with the computer. (TN6, female teacher)*

*The transition to online learning was terrible … Distance learning is quite difficult. Not everyone understands … We are studying until about one o’clock in the morning … It’s a nerve-wracking experience. (PS4 single mother of two children)*

A single mother whose daughter has learning challenges shared that her daughter received extra individual instruction from the teacher when she was learning in-person. Her academic progress was satisfactory, and she enjoyed a good relationship with the teacher. However, the child did not accept her mother’s instruction at home and was losing all interest in academic work over time.

*When I ask her to study, she does not want to study. We have a little baby, so she looks after the baby, and that is it. So, the child is already having less thoughts of going to school. Instead, she is mentally learning that all is linked with home (PS1).*

The above quote also indicates that while the child’s academic learning has been disrupted, she is learning her gendered role and future caring/nurturing responsibilities.

### **2. Mitigating inequities in distance/online education**

The long summer break gave MoES, local education authorities, school leaders and teachers time to prepare for the new academic year. Teachers across the different regions reported having received extended training in effective online teaching. By the new academic year, mainstream schools were provided access to online platforms. The two platforms identified by most participants were Online Mektep and BilimLand. Bokayev et al. (2021b) reported that around 70 thousand devices and 20 thousand routers/modems were purchased and distributed free of cost.

*Teachers of Informatics, they provided us with video resources ... Well, they taught us how to use, how to log in, where we should create and what, how to create video lessons ...Then we took training courses in the summer. ... The city education department provided us with these courses, which we could take for free. And we received certificates for this*. (TAR9)

The Regional Methodology Offices had developed and collected a pool of video lessons that teachers within the region could use and also add their own video lessons to the collection. However, some teachers did not find these videos very good quality or useful. Schools and educational authorities had distributed laptops, computers and prepaid Internet cards to parents with large families and low-income families. In one or two cases, parents themselves mobilised resources to distribute laptops to low-income families. Nevertheless, there were still not enough laptops and computers to meet all children’s needs in the household.

When the availability of digital infrastructure at home is deconstructed by location, it is clear that support for distance/online education was inequitably distributed across locations (see Table 3). With 10% of teachers claiming they have no access to the Internet at home and 10% of students reporting they have no computer/laptop at home, the challenges of distance/online education were profound for some teachers and students. These were mainly, though not exclusively, in rural areas.

|  |
| --- |
| Table 3. Percentage distribution of digital infrastructure at home |
|  | **Teachers** | **Students** |
| Rural & semi-urban | Urban | Overall | Rural & semi-urban | Urban | Overall |
| Computers or laptops |
| I have one but I share it with my family | 72 | 42 | 60 | 63 | 75 | 68 |
| I am not required to share my laptop with my family | 11 | 17 | 13 | 25 | 17 | 21 |
| Internet |
| No access at home | 8 | 8 | 10 | - | - | - |
| Access but poor connectivity | 50 | 25 | 30 | 19 | 25 | 21 |
| Access and good connectivity | 42 | 67 | 60 | 81 | 75 | 79 |
| Printer is available at home | 33 | 42 | 37 | 40 | 42 | 38 |

### **3. Perceptions of distance/online education**

With training and experience and greater support from schools and education authorities, teachers’ perceptions of distance/online education gradually improved over time. NIS teachers were confident that any initial challenges had been dealt with effectively. Likewise, most mainstream teachers in urban areas expressed confidence in their competence to effectively teach online. Despite perceived improvement in the quality of distance/online education, several concerns were voiced.

***Parental satisfaction remains largely negative*:** While teachers believed that parental complaints and dissatisfaction with online learning have declined over time, with one exception, parents interviewed held negative perceptions of distance/online education. Overall, parents agreed that their child’s education was less rigorous or had been compromised.

*but there is no teacher in front of him actually, who can see what he is doing. I am trying to stop his inadequate actions but not always I can do so*. (PN10)

***Access to stable Internet:*** The main challenge when offering interactive and communicative lessons in distance/online education is access to a stable internet connection. Teachers and students felt frustrated being kicked out of the virtual classrooms due to Internet issues, which disrupted lesson fluidity.

*There are problems with Zoom. Sometimes it kicks you out. It’s impossible to have a class. BilimLand also won’t load almost always. She [the child] completes the task, sends it, and they [teacher/school] do not receive it for a day or two. (PAR6)*

*The biggest problem for me is the internet connection … And sometimes … you have to miss the lessons due to it, which is undesirable*. (SAR2\_3)

Because the Internet in rural areas is unstable, rural teachers’, parents’, and students’ experiences of distance/online education remain highly challenging. For rural teachers and students, a smartphone and WhatsApp remained the primary sources of teaching/learning online, which does not offer a communicative virtual space. The unstable Internet forced some parents to send the child stay with a close relative in urban areas, so they had a better study situation. The poor quality of online learning in rural schools led some parents to spend their meagre resources on enrolling one child in a private school who would then teach their siblings. An urban NIS teacher explained he brought his younger brother from the village so he could study online with a stable Internet:

*Although his class teacher is always available on WhatsApp, other than that, nothing else is done. Online Mektep, as you know, just requires completing tasks. … he was just doing nothing. (TAR1)*

Effective teaching, whether online or face-to-face, requires teachers ‘to construct the teaching and learning process as an interactive, communicative process’ in which teaching involves ‘provoking a visible response in their students’ that indicates that learning is taking place (Westbrook et al. 2013, 2). Effective teachers constantly look at children’s facial expressions, body language, or questions to monitor students’ involvement, engagement, and learning. Because of inadequate Internet connection, most students switch their camera off, depriving teachers of opportunities to judge learning and teaching effectiveness.

***Short lesson duration*:** To reduce students' workload, education authorities instructed mainstream teachers to reduce their lesson duration to 20 minutes. Coupled with digital issues, the 20 minutes lesson duration did not give students sufficient time to ask clarifying questions or teachers ample space to ask a good number of individual questions to monitor student learning.

*At school it was possible to approach the teacher after the lesson and during the lesson. If it is wrong, the teacher could explain it or call you to the blackboard and on the blackboard you will solve a problem, and the teacher will say what the mistakes are, but now - no such an opportunity*. (SN1\_2)

Both digital challenges and short lesson duration were barriers to interactive and communicative teaching negatively impacted teaching and learning.

***Curriculum coverage*:** While the government instruction regarding reducing lesson time was intended to keep the child focused and reduce their physical burden, parents and teachers believed 20 minutes were not sufficient to cover the curriculum and explain the teaching points.

Anyway, even the teacher cannot teach a child the basics of this or that subject that they have in education within 20 minutes. He [teaches] only superficially, I guess. (PN5)

However, students did not raise the short duration of lessons specifically as a challenge to their learning.

Teachers identified an additional challenge with curriculum organisation. Some mainstream teachers claimed that the calendar plan on Online Mektep does not coincide with the teacher’s plan. This causes confusion and frustration for all concerned—teachers, students and parents.

***Variation in perceived challenges of distance/online education delivery:*** Stakeholders’ perceptions of distance/online education varied according to the age/grade of students alongside the disciplinary areas. Across the school sector, it was apparent that secondary school children are learning independently with little reliance on parental support. Teachers primarily communicate with secondary school children directly without the mediation of parents. They only contact parents when the child fails to turn up for lessons or complete instructional tasks. By contrast, parents’ involvement was pivotal in the effective distance/online education of primary school students. It was clear that without the sustained support of parents, primarily mothers, primary students’ progress and effective online teaching was, challenging, if not impossible. Children whose parents needed to be at work or those whose parents lacked subject matter knowledge or teaching/ digital skills were more likely to lose out. Parents with children in primary school found distance/online education extremely stressful.

*My level of education is not enough to help with children’s learning. (PS10)*

*And a very heavy load falls not upon the teachers but upon the parents. Parents should monitor the process. For parents who work offline, it is very difficult to monitor if the child is attending classes or if they are sleeping during that time. (PN1)*

Similarly, the effectiveness of online teaching was linked to the subject area. For example, a history teacher believed she could effectively teach lessons online by using videos and information on the Internet. Still, children needed to have atlases and maps available at home, which was not the case for most children (TAR6). When she sends them a soft copy, most do not have printers and use their smartphones on which ‘*the contour map turns out poorly*’ (TAR6). Teachers teaching sciences expressed students are still losing out because they can only see demonstrations of science experiments through videos but do not get opportunities to do experiments. For language teachers, it was challenging to give students sufficient opportunities to practice listening and speaking skills. However, a history teacher had developed a strategy that she thinks has enabled all her students to develop their oral skills. Instead of always asking to write their answers, she frequently asked them to record their response orally. While it was cumbersome for the teacher to go through so many video/audio recordings, she was happy to see that all children’s speaking skills had improved.

*Children record their answers; they send it to me; I listen. It is good that speech skills are developing; they formulate their thoughts; they also retell and answer. (TAR6)*

Physical education teachers found it hard to correct students’ mistakes and were worried about the health and safety of children:

*We give them [students] a task. They are filming, sending video material to me. But when I watch them, I see a lot of mistakes. Of course, I write to them, “You have a mistake here; you are doing it wrong there.” ... when I see him performing something in person, I can immediately show the grips; I can immediately correct any exercise. (TAR9)*

Even those students who viewed themselves as good learners concurred that it is harder to understand and learn some subjects like algebra, geometry, biology and chemistry online.

*Until the 7th grade, I understood everything … I knew how to solve it and how to apply it, and now I even have to look for additional sources of information to understand this or that topic. There is little practice, in my opinion. The teacher seems to be explaining and showing an example, but it’s still difficult*. (SN1\_3)

Not all parents are competent to teach all subjects to secondary school students. Parents who cannot afford private tuition have to learn subjects such as mathematics themselves in order to support the learning of their children.

*I had to study everything in mathematics myself … I am not a teacher; I do not get a salary for this; I have a lot of household chores; I also work like everyone else; and I still had to study with my son until 12 midnight or until one o’clock so that he could understand something. (PS9)*

Even teachers with secondary school children grappled with helping their children in subjects other than their area of specialism.

### **4. Student learning and engagement**

**No reliable assessment data exists:** Stakeholders across the school sectors and urban and rural locations expressed that no reliable knowledge exists on what students know or do not know. This knowledge is pivotal to offer remedial teaching when schools start operating entirely on-site. Assessment serves a range of purposes such as improving instruction, motivating learners, improving learning, identifying students who need tailored support, making judgements about the quality of teaching and learning, and certifying students. However, students and parents mainly approached assessment as an “end” rather than a means towards improving learning. Both NIS and mainstream teachers indicated they do not have reliable assessment data as students copy from one another or parents are completing assessment tasks for children. Both parents and students concurred with teachers.

*Some want to stay at home. They say if they stay at home, they can copy each other’s work using WhatsApp.* (SN2\_3)

*I think it [possibly means the grades] are too high. So, if the child is an A student now, tomorrow, when he goes back to traditional education and starts to study, he will have C’s maximum.* (PN5)

Teachers had been advised not to score too harshly to keep parents’ complaints to a minimum. Even when they were sure some students copied their assessment tasks, teachers did not confront such students as they could not provide evidence of malpractice/collusion. Teachers were also afraid of provoking parents. Because of unstable Internet connection, teachers could not assess students in real-time, giving students more time to collude. Some teachers revealed that, like students, parents conspire in producing and sharing assessments/homework tasks for their children.

… they created chats for parents. They do the homework; they cheat and copy from each other. (TAR6)

**Is formative assessment the answer to curb collusion and promote student learning?** Teachers were directed to introduce formative assessment to ensure continuous and sustained student effort and attention. Nevertheless, parental and cultural attitudes towards assessment remained a hindrance in utilising the benefits of formative assessment. Teachers complained that many students were encouraged by parents not to take formative assessment seriously and focus more on SAU [Summative Assessment for the Unit] or SAT [Summative Assessment for the Term]. Many students who did not do anything throughout the term or did things half-heartedly managed to perform brilliantly on SAU and SAT, and teachers could not penalise students who skipped formative assessment.

**What are teachers doing about ensuring academic integrity?** Establishing academic integrity was a daunting and rather impossible task for teachers. While some teachers did not worry too much about this situation, others took a considerable amount of time to construct assessment tasks that would minimise collusion. For example, some created different versions of an assessment that tested the same outcomes/skills but used slightly different questions and tasks. Of course, this added to teachers’ workload, which many claimed has increased tremendously because of online schooling.

**Whose learning and attention is lagging?** Perceptions of the impact of distance/online education on students’ learning and engagement varied across and within stakeholders. Most teachers felt that students whose performance was high before the pandemic remained engaged online and performed well according to their past accomplishments. By contrast, the engagement and learning of students who struggled before the pandemic remained a concern online. Some teachers believed that learning and engagement have worsened for students who were already low-achievers or shy and introverted.

*However, there are, actually, pupils who cannot speak online; they hesitate when speaking, they repeat the same words, then, when asked to speak, there are moments when they cannot say even a word*. (TN1)

To the contrary, some teachers reported that some of their low-achievers have blossomed in online mode.

*I have three specific children. These children have improved a lot. And not because their parents help them. They improved on their own … They just could not keep up with the more successful students, the fast ones when at school, in the classroom. Now they have enough time; they delve deeply; they are very serious, meticulous; they do everything thoroughly, and they read … All three of them have A’s in my subjects. Today I specifically looked at how they do in other subjects, and they improved across all subjects*. (TAR6)

Teachers attributed the increase in such students’ performance and engagement to the flexibility of online mode. In on-site learning, everyone is expected to learn and complete tasks at the same speed. In the distance/online mode, students had the opportunity to learn according to their own speed, resulting for some in better engagement and learning outcomes. This unplanned differentiation was advantageous for some.

Parental perceptions, in contrast to teachers, were far less optimistic. There appeared an agreement that the learning of children has deteriorated during the pandemic.

*Well, to be honest, even if you ask children, they say that their level of education is dropping due to online education*. (PN8)

Parents expressed they could not monitor how their children spend their time online and many were concerned children are spending a lot of time playing online games. Likewise, most students concurred that they had lost motivation, focus and interest. In addition to being distracted by household chores or other situations, students lost social interaction with key people—their peers and teachers—who were their primary source of motivation. Some students found the disappearance of the boundaries between the school, described as a place where one learns and engages in academic pursuits and home, viewed as a place for relaxing, entertainment and doing chores unhelpful for sustaining their interest and concentration.

*my classmates motivated me … there was something like a rivalry. And now the interest has completely disappeared*. (SAR1\_4)

Students also mentioned that their curiosity of how teachers would explain the topic flamed their interest, and watching online or video presentations at home was a poor substitute for a live face-to-face lesson.

## **Wellbeing and Equity**

The pandemic has for the most part negatively impacted stakeholders’ wellbeing with these impacts being unevenly distributed

### **1. Absence of school commute and quality of life**

All stakeholders indicated that the release from compulsory school commute in Kazakhstan’s harsh winter climate of sub-zero temperatures and heavy snowfalls relieved them of the daily stress of commuting to schools. Understandably, single mothers and parents who had to pick and drop children from different institutions (Kindergarten, primary or secondary) or at different times, in particular, noted a reduction in their stress levels, as noted by a single mother of 5 children:

*You don’t have to rush to several places. [laughs] It’s just that one of my daughters starts her studies at 12 o’clock, and the other at 1:40 pm. Then I pick up one at 3 pm, and the other at 5 pm, rushing here and there. I have to leave the little child here with the oldest daughter and run around. Plus, you need to have time to pick up another child from kindergarten.* (*PS2)*

Parents were happy that children were sleeping longer, staying healthy and safe, and protected from cold weather. Students expressed that they get more time to sleep as they do not need to commute or spend time wearing school uniforms. They noted that school closures had enabled them to spend more time with family bringing them closer to their families.

Female teachers across rural and urban locations and age and family circumstances liked spending more time with their families. Even though teaching online has increased their workload, they are better positioned to distribute their time across their work and familial responsibilities. Because the spatial boundaries between work and home have disappeared, they move in and out of their domestic and professional duties throughout the day to work more efficiently. They get a greater sense of satisfaction as mothers, which has boosted their emotional wellbeing: ‘*Since we were at home, I felt like a mother on vacation*’ (TAR4). Only a few teachers complained about the blurring of boundaries between work and home.

### **2. Work-life balance**

Notwithstanding the saving of time from school runs, school closures have created additional work for all stakeholders with negative impacts on their wellbeing and quality of life.

Teachers had to manage numerous chat groups with parents of different grades, with school administration, with students of different grades and with colleagues and homeroom teachers. They have to call students who are not turning up for lessons. If they cannot connect to such students, they have to call their parents who might be at work. They have to inform the homeroom teachers about students who are struggling and need better support at home. Students can return their completed tasks in a longer time frame, so teachers have to monitor their phones to both check and correct students' work or provide help if needed. Although teachers noted that with time they have become more skilful and efficient in producing lesson videos, they still spent a lot of time video recording lessons. Assessing students' work online was noted as a considerable constraint on teachers’ time. Teachers felt imprisoned by the demands of online teaching.

*And here I am chained to the phone and to the computer for the whole day. (TAR6)*

Parents, particularly mothers who were mainly doing the homeschooling, likewise complained of a heavy workload. In addition to routine chores such as cooking and cleaning, they have to learn subject matter they don’t know in order to support their child, monitor the child, manage arguments among children, especially over space and laptops/smartphones, communicate more frequently with teachers and offer an account to teachers why the child is not on track. Mothers with many children were inundated, like teachers, with managing multiple chat groups. Besides, working mothers, including teachers, have to manage all of this whilst managing their professional demands.

*I get really tired because I have to cook breakfast, lunch, and dinner, and all this together with SAU and SAT at the same time. … It is physically difficult for me and I have to do my main work at night when it is quiet and everyone is asleep*. (PAR9)

Both teachers and parents noted the challenges of teaching primary students online.

*They [parents of primary school students] cannot sit next to their children from morning till evening. They also have to feed their child and go to work. Therefore, I say that it is exceedingly difficult to be online for primary school children*. (TN6)

Likewise, students noted an overwhelming increase in the amount of time they spent on homework. Adolescent children also mentioned time spent on doing house chores.

*I do my homework for 6-7 hours and do not have time because my mother tells me to do this, and I tell her that I have to do my homework. And she says that homework isn’t going anywhere, and then the dishes need to be washed. (SN1\_2)*

Similarly, another adolescent girl mentioned that the house is much cleaner now as she could contribute to household chores (SN1-1). Global evidence similarly indicates that domestic chores, particularly for girls, and farm work, can impede on getting sufficient learning time (UNESCO, 2020d).

### **3. Physical wellbeing**

The tremendous increase in the workload of teachers, parents and students carried implications for their physical wellbeing. All teachers, particularly older ones and those who had existing health conditions, complained of backache, headaches, generalised body aches and declining eyesight because of extended working hours and sitting long hours at the computer or focussing on a small phone screen for many hours. Inactivity led to putting on extra weight, which in some cases resulted in health issues:

*one month was enough for him (teacher’s husband, a teacher too) to gain weight, get sick, and get surgery. (TAR9)*

Parents also complained of backaches:

*A lot of time in front of the computer; a sedentary lifestyle. It had a big impact. I mean, I have backaches. It also greatly affected my health.* (PAR 2)

Both teachers and parents were concerned about students losing eyesight because of being on the phone or laptop for extended hours: ‘*the child’s eyesight is deteriorating, because she’s either on the phone or the computer all day long*’ (PAR7). Likewise, students complained of tired eyes: ‘*my eyes are very tired, and it was difficult to stay at the computer desk’ (SS2\_4).*

Some teachers had been infected by COVID-19 or had a family member infected during summer 2020. They recounted little medical help was available at the time because hospitals were operating at full capacity. They complained essential medicines were either not available or when available, were being sold at high prices. In one case, an entire neighbourhood was infected, but authorities were not informed because of fear of hospitalisation:

*Somehow, we asked each other about how to be treated, what pills to take, what injections to use, and somehow, we overcame this disease*. (TSI)

The above incident indicates that the fear of seeking help from medical professionals left infected people figuring out on their own what treatment to take, which could have further aggravated their health, alongside adding further psychological stress. Participants’ overall health was also impacted indirectly. Because of fear of catching the COVID-19 infection from the hospital, participants avoided or delayed seeking medical help for other conditions.

### **4. Psycho-social and mental wellbeing**

***Anxiety and fear of COVID and vaccination:*** The fear of catching COVID-19, seeing neighbours and relatives dying of COVID-19 greatly impacted the participants' psychological and mental wellbeing. This fear was much stronger at the beginning of the pandemic:

*It affected children psychologically in the beginning; they couldn’t go out. Various poems and messages about the coronavirus on social networks aroused fears among people*. (TN9)

*My classmates, including me at the beginning of the school year, had some depressive thoughts. We became sad more often. The emotional state was greatly influenced.* (SN1\_2)

A student in NIS very much appreciated the psychological and mental health support the school offered during school closure:

*In terms of mental [health] support, the school provides real help to every student. The curator is constantly in touch with us; every day … She tries to give us various tools to allocate time or prioritise things there. Also, teachers are always ready to help and open in communication. (SAR2\_4)*

Because community bonds are much stronger in rural areas, rural participants felt devastated by the destruction of lives and livelihoods: ‘*Oh, so many people died in our village due to this pandemic. At that time, people were terribly stressed’* (TAR4).

In February 2021, Kazakhstan started its vaccination campaign. Unlike some European countries, Kazakhstan has adopted an occupation-based approach to vaccination, which prioritises health-care workers, teachers and the police. At the time of writing this report, teachers are actively encouraged to get vaccinated. However, participants report the lack of clear information about the potential impact of a vaccine (Sputnik V) on their health, seems to stir misinformation and fear: *‘I am worried about the state of the vaccine, about what happens if we get vaccinated’* (TN4).

***Communication and justification of quarantine regulations:*** By and large, participants supported government decisions regarding school closures to protect lives and prioritise health and safety. Nevertheless, some participants complained government authorities were not transparent or forthcoming with COVID-19 information. They had to search for updated information on social media, or they were accepting what friends or relatives told them, which added to their stress levels.

*I mean, there is no communication between the government and the people. Where should we learn things from? We learn these from bloggers. (TAR1)*

Additionally, participants could not always see the rationale behind government regulations about the pandemic or found government regulations illogical, too hasty or too late. Many believed that people in some sectors, such as hospitality and retail, went bankrupt or were buried under a massive pile of debt even when the government offered a financial relief of 42 thousand KZ ₸ per month to those who had become unemployed.

***Social wellbeing:*** While the fear of catching COVID ensured greater compliance with social distancing regulations, participants across the stakeholder groups experienced social isolation, impacting their psychological and mental wellbeing.

*Sitting in a four-wall corner [an idiomatic expression meaning “like in a cage”] had a bad effect. I didn’t talk to anyone; I didn’t go anywhere (SS\_2)*.

Students feared developing social phobia because of a lack of social interaction. The most crucial thing they missed about the school was the social rather than the academic aspect:

*At school there was a society and a lot of people, that is, you were surrounded by friends and acquaintances, but there is no one at home, you feel lonely, no one texts you now. Everyone who was with you at school has disappeared somewhere. You are no longer friends and do not communicate*. (SN1-2)

Given the reliance on digital access for social interaction, it is reasonable to conclude that children who are the most excluded digitally would also be those who feel greater social exclusion. Indeed, one parent narrated the story of how one child without a phone became a social outcast ‘for the school and the class’ and rather than helping the family, other parents ‘*pounced*’ on the child’s parents:

‘*How come that in the 21st century, neither their mother nor father has an android phone? … Why don’t [they] earn enough to buy an android*?’ (PN1).

### **5. Relationships**

Another factor associated with stakeholders’ wellbeing is how school closures have impacted relationships. Distance/online education has impacted family relationships, relationships between parents and teachers and relationships between school leaders and teachers.

***Family relationships:*** While social interaction with the peer group has declined, children have to share space and resources with parents and siblings all the time. This, in some cases, has led to arguments and tensions with siblings and parents. Tensions over resources were common in families with multiple children and those living in small dwellings relative to family size.

*And everyone becomes angrier, to stay with a person alone at home ... it’s uncomfortable. (SN1\_1)*

As mothers mainly provide homeschooling, ensuring the child remains on track brought many mothers in constant collision with their children. Mothers had to constantly remind their children to do their schoolwork and push them academically, which impacted their relationship with their children:

*Because the mother takes on the teacher’s responsibility … and the relationship with the child deteriorates as a result. So, you choose: either your child will have a bad grade, or you will have a bad relationship with the child*. (PN1)

***Relationship between parents and teachers:*** Ensuring children’s educational progress during homeschooling brings mothers in tension with both their children and teachers. One area of friction that stands out is assessment. While teachers maintained parental complaints had declined over time, parents still challenge teachers on their judgment and scores, creating additional work and stress for teachers. Teachers had to explain to parents what was wrong with the child’s answer and why marks were deducted. Teachers had to spend considerable time justifying their grade and develop a lot of soft skills to handle angry parents who were discontented with the teachers’ grading.

Teachers believed that such complaints had increased because most parents are completing the assessment tasks for children. Therefore, a low score disgraces parents: ‘*because the mother helped the child, she was ashamed in front of her son about getting the low score, she expected more’* (TAR4). Teachers expressed parents had little interest in children’s learning and were more concerned about children’s scores. Nevertheless, some parents wanted to understand the assessment criteria and teacher feedback in order to work with the child in areas that needed improvement. They expected such information to be provided via the online platform (e.g. Kundelik) but were disappointed not to find it there.

A second factor negatively impacting parent-teacher relationships was a lack of empathy, particularly on parents’ side. Parents expressed little appreciation for the challenging contexts in which teachers were supporting children’s online education. Many believed teachers were shirking from their responsibilities and were not making a wholehearted effort to support children.

*Well, look. I think about how the teachers are paid. They have a regular schedule, from eight to five, right? … A forty-hour week. … I want to say that if you come to work, please fulfil your responsibilities up until 5 pm. I do not want my child to suffer all his life from your crumbs that you give during an hour. (PAR1)*

Teachers complained parents did not realise their challenges. Teachers’ salaries in Kazakhstan have been recently increased by 30% (under the new “Law on Teachers’ Status”). One teacher shared that parents wrote in their chat groups:

*“Why add to their salaries if they stay at home”. Yes, we are sitting at home, but it is such a huge work. It would be so much easier for me to work at school rather than from home. They don’t understand it; they don’t appreciate it. And, unfortunately, this kind of negative attitude in our relationship with parents was caused by distance learning.* (TAR6)

While some teachers complained about a lack of parental support to children’s education, many teachers appeared empathetic and appreciated parents' constraints. They were also aware that some parents are in a much more challenging situation than others.

*parents don’t have the time to monitor them all day, right? They are at work, the children are on their own at home during online learning … The parents might come home late from work. Well, there are different situations, right? (TAR7)*

The pandemic has strained parent-teacher relationships considerably. These tensions have to be addressed, enabling them to work as partners and collaborators rather than as foes.

**Relationship between school leadership and teachers:** In general, teachers did not critique school leadership. However, many teachers mentioned being constantly under surveillance by school leadership who attend and observe their classes, check the time they log in and out of the online platform and call them if a form is not filled in time.

*They monitor every day, highlighting “you did not do this, you did not do that” either in Kundelik or BilimLand (TS2)*

An increase in parental complaints during the transition to online learning might explain why school leaders monitor teachers so closely. It appeared that new school principals were more strictly monitoring teachers’ online activities. New principals might want to set standards of work and expectations at the beginning of their leadership, or perhaps they feel they do not know the teachers well enough to trust them. The principal’s leadership style will also influence how closely they monitor their teachers.

### **6. Financial wellbeing**

The financial impact of the pandemic varied across the stakeholder groups. While the pandemic has negatively impacted several sectors of the economy, teachers’ income has remained stable since schools in Kazakhstan are mainly funded by the state. All teachers expressed gratitude that the government paid their salaries on time.

*We were not downsized; we didn’t lose a bit of our salary. Our government protected us.* (TAR9)

Besides a stable income, teachers saved money on the school commute, buying food at work, purchasing uniforms and expensive winter garments for children and buying personal clothing and beauty items: ‘*previously I needed to spend money to get well-dressed for the school and work*’ (TS2). Additionally, some mainstream teachers also saved money as they no longer needed to buy stationary for work. Mainstream teachers have previously complained that teaching the updated curriculum is dependent on teaching/ learning resources which are often not made available by the school, forcing them to use their own money to spend on things like print-outs, markers and other stationery items (Azhmukhambetov, 2020).

 However, the above savings were offset by the money teachers needed to spend on paying for Wi-Fi and mobile data for smartphones. Rural teachers also mentioned buying expensive devices to save their status and respect in the community:

*We had to adapt, so that we do not lose our status. … Some bought gadgets on credit to teach.* (TS10)

While parents were saving money on school commute, buying school uniforms and winter garments for children, they incurred additional costs because of school closures. Parents had to spend money on purchasing equipment, such as smartphones, laptops/computers, and monthly Wi-Fi/mobile data bills. Many parents were concerned about the quality of distance/online education and, as a result, opted for paid tutorials. This remains the case even for some teachers, particularly rural, who had to make hard decisions between buying food or invest in paid tuition for their children. It appeared that some teachers were encouraging parents to buy extra classes from them on a paid basis. Stay at home mothers had to find paid work to compensate for the loss of income due to the need to provide their child(ren) paid tuition:

*Our lessons now last literally half an hour. During half an hour, she learns like four lessons. This is not possible at all. And even I, as a mother who had been staying at home all this time, had to start working because I cannot afford the tutor now*. (PAR1)

All of the above additional costs came at a time when some working parents saw a reduction in income and working hours due to the setback to the economy. Even when a single mother of five children received TSA (Targeted Social Aid) from the government, her financial situation was affected because alimony and child support from her ex-husband had been reduced and paid irregularly because her ex-husband’s work had been reduced.

Students, on the other hand, were happy that they do not need to worry about money to buy food at school and could eat whenever they feel hungry: ‘*At school, you cannot buy yourself something because there is not enough time or money…at home you can eat at any time’* (SN1\_1).

Overall, the financial impact of the pandemic on teachers was less profound. The government has paid teachers’ salaries on time and have given them a pay rise. The financial impact on parents was more profound and linked to differing parental occupations.

# **Conclusion**

Despite some positive impacts of distance/online education, such as the opportunity to spend more time with family and the relief from the stress of school commute and the resulting saving of time and money, school closure negatively impacted all stakeholders’—parents, teachers and students—broader wellbeing, with such impacts notably greater for some groups. It appears that NIS teachers and students (and by corollary their parents) were satisfied with the quality of education to a large extent. By contrast, stakeholders associated with mainstream schools voiced a range of concerns related to education quality. Even within mainstream schools, rural dwellers, low-income families, single mothers, working mothers, less educated parents, families with many children or, primary school children and families with disabilities face multiple challenges to their wellbeing. The greater the digital exclusion, the more significant the negative impact of distance/online education has been on stakeholders.

Teachers' experiences of distance/online education differed. NIS teachers, who were already adept in using digital technologies and enjoyed greater professional autonomy, received timely and substantial digital support and capacity development for effective transition to online learning. NIS teachers teach academically gifted students who also received extensive digital support from the school. Understandably, the experiences of NIS teachers of distance/online education were mainly positive. Their sense of the self and satisfaction as a teacher had remained intact.

By comparison, mainstream teachers were far less ready for the transition and received less systematic support from schools and educational authorities. Nevertheless, mainstream school teachers did receive practical and helpful professional development opportunities over the summer of 2020. After a deep learning curve, mainstream teachers’ sense of the self and satisfaction as a teacher improved over time. Older teachers found the transition to online learning significantly harder and reported more significant negative impacts on their health. Rural teachers’ digital access remained fragmented, forcing them to use WhatsApp exclusively, which negatively impacted their lessons, sense of satisfaction, and physical health. Teachers of primary school children found it particularly hard to teach effectively without substantial educational input from parents. Teachers of specific subjects, namely physics, chemistry, biology and physical education, have a much harder time helping students achieve learning outcomes in their respective subjects. On a positive note, teachers’ income has remained stable or improved because of the pay rise. Because the state funds most schools in Kazakhstan, the shock to the economy has not impacted teachers directly.

Learners’ experiences of distance/online education were likewise differentiated. While the study did not include any primary school children, both parents and teachers voiced their opinion that primary school children’s learning had been severely impacted. All stakeholders identified profound implications for students in graduating classes since they have to undertake a high stakes assessment known as Unified National Test (UNT). The UNT is taken by students completing 11 years of schooling. It serves both as a school-leaving exam and determines ‘which course, if any, they may enter at which higher education institution’ (Winter et al., 2014, 106). Secondary school students experienced significant challenges learning science subjects and mathematics. Students who transitioned from primary to secondary school experienced profound challenges and lacked familiarity with support structures in the new school context. The learning and engagement of students who were low-achievers before the pandemic and introverted/shy students were believed to have specifically been impacted. Most stakeholders thought the impact on learning and student engagement have been profound. However, estimating the learning loss is hard to establish because stakeholders agreed that assessment data is highly unreliable due to parents writing assessments for children and academic dishonesty by students.

Gendered impacts of the pandemic and distance/online education are visible. Mothers are doing the bulk of homeschooling. This remains the case even when one of the parents is a male teacher. Because the teaching workforce in Kazakhstan is feminised, female teachers predominated (N=26) the teacher participants. With the exception of three cases, all female teachers had children. These teachers carried a double burden of supporting the homeschooling of their children and teaching their students remotely under considerable challenges. In all cases, female teachers also performed domestic chores such as cooking and cleaning. Rural teachers, both females and males, also mentioned working on the farm, which they believed rural students also regularly help with and more so now that they are at home all day. It was apparent that adolescent girls’ time during distance/online education was also pressured by household chores such as washing up and cleaning. The latter finding would benefit from further exploration. Gender is also associated with tensions in relationships resulting from remote learning. Since mothers are doing homeschooling, they are responsible for disciplining children and pushing their academic performance. This seems to have considerably strained children’s relationship with their mothers. The relationship between mothers and teachers, who are mostly women, are under significant pressure over children’s academic progress.

The health and health maintenance of stakeholders has also been negatively impacted. While only a small number of stakeholders had been infected with COVID-19 or had been carers for relatives ill with COVID-19, all felt anxious about getting COVID-19. Many had seen neighbours, acquaintances or relatives dying with/of COVID-19. A lack of transparent and open communication from government authorities on COVID-19 and quarantine measures further heightened stakeholders’ anxieties. During the peak of COVD-19 infections, essential medicines were either unavailable or sold at higher prices. Participants did not seek medical help either because hospitals were overwhelmed or because of fear of being hospitalised if they tested positive. While currently the Sputnik V vaccine is offered to teachers, many are sceptical and want more information on it before committing to get the vaccine. Distance/online education has negatively impacted all stakeholders’ health because of a substantial increase in workload, being forced to use digital gadgets for extended hours, inactivity, putting on weight, and experiencing social isolation.

# **Recommendations**

## **Policymakers**

***1****.* ***Ensure return to school:***Most parents, teachers and students want a return to school. All stakeholders appreciate the significance of health and safety but at the same time acknowledge that equitable quality education is much more challenging in the distance/online mode. The Ministry of Healthcare of the Republic of Kazakhstan needs to ensure the upscaling of COVID-19 vaccines to the general population, including teachers for sustainable on-site schooling. The vaccination campaign in Kazakhstan began on February 1st 2021. However, by March 5th, only 133,279 people had received their first jab (Lillis, 2021). Teachers would benefit from an information campaign that would persuade them to take the vaccine. The failure of the vaccination campaign to meet its targets has coincided with a spike of coronavirus cases in the two largest cities, Almaty and Nursultan. In Almaty (Liter.kz, 2021, March 27th) and Nur-Sultan (24.kz, 2021 March 29th), schools have gone back to distance/online education by government direction.

***2. Gender equity*:** Integrate an intentional gender lens in policy measures to mitigate the impact of COVID-19. UNESCO (2020e, 21) stresses ‘transforming the inequities of unpaid care work into a new, inclusive care economy that works for everyone.’

***3.******Digital equity:***Schools will likely use some form of digital learning for years to come. Investment in expanding access to a stable Internet connection, particularly in rural areas and areas further away from cities, is necessary for equitable quality education. While the government has sought to mitigate digital inequality, more investment is needed to provide digital devices to both teachers and students. Single mothers need greater support with access to laptops and Wi-Fi, even if they do not meet the definition of a large family. Parents and teachers are incurring monthly expenses for Wi-Fi subscriptions. Financial support with these costs for the marginalised groups is a way to support digital equity.

**4. *Redistribution is pivotal to building back better*:** The pandemic has widened the existing gaps between different school sectors (NIS, private and mainstream), schools across urban and rural locations and between able-bodied students and learners with disabilities. Building back a better education system will require redistributing educational funding and human and educational resources to disadvantaged schools and marginalised learners.

**5.** ***Shifting attitudes towards assessment:*** There is a need to appreciate the difference between learning and assessment and use the latter as a means to promote learning and teaching rather than an end goal. Such a culture of assessment will direct the efforts of all stakeholders—parents, students and teachers—on enhancing learning and teaching whilst removing an antagonistic relationship between teachers and parents. Such a shift would require giving more weightage to formative assessment and de-emphasising the role of high-stakes assessment.

**6. *Assessing digitally:*** Investments in educational technology could support developing assessment approaches resistant to cheating, collusion and plagiarism to produce reliable data for making fair academic and administrative decisions. Additionally, teachers’ capacity in constructing assessment tasks that suits the online platform needs to be developed.

**7**. ***Assess the quality of the video lessons bank.*** The quality of the video lessons collected by Regional Methodological Offices needs to be assessed, so teachers are not frustrated by spending many hours locating a suitable video lesson for their class.

**8*. Reconsider the lesson duration:*** While well-intended, the 20 minutes lesson duration negatively impacts curriculum coverage and effective instruction.

**9. *Training programmes for parents:*** Training programmes for parents on effective remote learning at home would strengthen family wellbeing and support effective remote learning in the future.

**10.** ***Inclusion of digital literacy in pre-service training:*** Teacher’s digital competence has been crucial to effective instruction during the pandemic. To better prepare student-teachers for future pandemics, pre-service training programmes should embed digital literacy and competency firmly in their curricula.

**11. *Communication about COVID-19 regulations:*** Regular, transparent and effective government communication about policy measures in the context of the pandemic will build trust between education stakeholders and the government. It would also alleviate stakeholders’ stress and prevent stakeholders’ need to go to other outlets of information that might not offer reliable information.

## **School leaders**

***1.* Develop a plan for supporting the psycho-social needs of students and teachers:** This support needs to be included in the school short and long-term recovery plan.

***2. Teacher autonomy:*** Giving teacher autonomy to choose digital platforms that work best for them and their students would reduce teacher workload, stress and support effective learning and instruction.

**3. *Align the school work plan in Online Mektep to teachers’ actual teaching plans*:** This will eliminate confusion and ensure students do not miss out on course content.

***4. Continue supporting teachers’ professional development:*** Some form of distance learning is likely to be used for a long time. Therefore, teachers’ digital competence needs to be developed on an ongoing basis as technology changes quickly.

***5. Teacher collaboration:*** Regular online teacher meetings for sharing ideas and planning together is helpful for professional development and combating social isolation.

***6. Parental support:*** Some parents will need both technical and educational support to tackle issues related to the digital divide. Parents with disabled children need help from professionals that support the varying additional needs of their child.

***7. Improving parent-teacher relationship****:* The relationship between parents and teachers is central to learner’s success. Sustaining regular and clear communication with parents about curricular and extra-curricular issues and what the school expects from parents would help prevent ongoing conflicts between parents and teachers.

## **Teachers**

***1. Expectations from parents and understanding family situations:*** Teachers need to understand that parents cannot fully replace a teacher. Parents’ role is to make sure their kids attend their lessons, are awake, and pay attention. However, it is the teachers’ role to plan and provide effective instruction. Some families might be experiencing significant challenges. Therefore, like students, families also need differentiated support.

***2. Provide supportive pedagogies:*** Supportive pedagogies can sustain students’ motivation and interest. Teachers can help students by giving clear instructions and guidance on managing time and staying focused in the face of distractions, using multiple ways of checking learning progress and providing a structure that encourages motivation while also giving flexibility. An essential first step is to prepare students to take responsibility for their learning. Providing emotional support is particularly relevant in emergency situations and crises, which students may experience as stressful and where their usual support networks may be limited (Yates et al., 2020).

***3. Peer-learning:*** While collusion and copying from others in assessed tasks count as academic misconduct and must be discouraged, peer collaboration should be encouraged. Peer learning is highly effective as learner’s find it easier to approach one another for help. Working together to produce educational products is enjoyable and promotes teamwork. Greater use of pair- and group-work will reduce reliance on parents and help combat social isolation.

***Assessment:*** Uselow-stakes assessment to get a clear picture of student learning and identify those who need remedial teaching. When using high-stakes assessment, give clear instructions about the task and the assessment criteria. Use a variety of tasks and give adequate time for completing assignments. Providing timely feedback to students and parents will enhance student learning and motivation and prevent parental discontent.

***Keep students’ workload manageable:*** A realistic workload is essential for students’ academic progress and broader wellbeing. Subject teachers can liaise with one another and the homeroom teacher to prevent overwhelming learners with schoolwork. Being able to complete fewer tasks well will help keep students better engaged and motivated.

# **References**

24.kz. (2021) *Uzhestocheniye karantina v Nur-Sultane: kak budut uchit'sya shkol'niki Istochnik. Tightening quarantine in Nur-Sultan: how schoolchildren will learn.* 24.kz. Available at: <https://24.kz/ru/news/obrazovanie-i-nauka/item/464135-uzhestochenie-karantina-v-nur-sultane-kak-budut-uchitsya-shkolniki> **(**Accessed: 2 April 2021).

Agency of the Republic of Kazakhstan on statistics. (2021) *Gender Pay Gap.* Available at: <https://gender.stat.gov.kz/page/frontend/detail?id=18&slug=-14&cat_id=7&lang=en> (Accessed: 27 February 2021)

Aimagambetov, A. (2020a) [Facebook]. Available at: <https://m.facebook.com/askhat.aimagambetov/posts/10215721164798377> (Accessed: 16 March 2020)

Aimagambetov, A. (2020b) [Facebook]. Available at: <https://m.facebook.com/story.php?story_fbid=10215749464425850&id=1120704037> (Accessed: 19 March 2020)

Allan, J. & Omarova, T. (2020) Disability and inclusion in Kazakhstan, *Disability & Society,* *1-18*. <https://doi.org/10.1080/09687599.2020.1867073>

Almukhambetova, A. & Kuzhabekova, A. (2021) Negotiating conflicting discourses. Female students’ experiences in STEM majors in an international university in Central Asia, *International Journal of Science Education*, DOI: 10.1080/09500693.2021.1875150.

Armitage, R. & Nellums, L. B. (2020) Inequalities in the school closure response to Covid-19, *Lancet*, 8(e644). https://doi.org/10.1016/ S2214-109X(20)30116-9

Bokayev, B., Torebekova, Z., Abdykalikova, M. & Davletbayeva, Z. (2021a) Exposing policy gaps: The experience of Kazakhstan in implementing distance learning during the COVID-19 pandemic, *Transforming Government: People, Process and Policy*. <https://doi.org/10.1108/TG-07-2020-0147> (Accessed: 3 April 2021)

Bokayev, B., Torebekova, Z., Davletbayeva, Z. & Zhakypova, F. (2021b) Distance learning in Kazakhstan: estimating parents’ satisfaction of educational quality during the coronavirus, *Technology, Pedagogy and Education*, 1-13.

Bridges, D. (Ed) (2014) *Educational reform and internationalisation: the case of school reform in Kazakhstan*. Cambridge: Cambridge University Press.

Eyles, A., Gibbons, S., & Montebruno, P. (2020) Covid-19 school shutdowns: What will they do to our children’s education? A CEP Covid-19 analysis. Paper No.001. Centre for Economic Performance. London School of Economics and Political Science. URL <http://cep.lse.ac.uk/pubs/download/cepcovid-19-001.pdf> (Accessed: 5August 2020).

Gimranova, A., Shamatov, D., Sharplin, E., & Durrani, N. (2021) Education in Kazakhstan. In Wolhuter , C.C. & Steyn, H.J. (eds.) *Education Systems Entering the Twenty-First Century.* Noordbrug: Keurkopie,p. 404-

Hamel, L., Lopes, L., Muñana, C., Kates, J. & Michaud, J. (2020) KFF Coronavirus Poll: March 2020. *The Henry J*. *Kaiser Family Foundation*. URL <https://www.kff.org/global-health-policy/poll-finding/kff-coronavirus-poll-march-2020/> (Accessed 5 August 2020).

Helmer, J., Harper, H. & Wolgemuth, J. (2018) Teachers’ values and expectations of Technology in Northern Territory primary schools. *The Eurasia Proceedings of Educational & Social Sciences*, 10 (1), pp. 156-162.

Irsaliyev, S.A., Kamzoldayev, M.B., Tashibayeva, D.N. & Kopeyeva, A.T. (2019) Analiticheskij otchet “Uchitelja Kazahstana: pochemu molodye ljudi vybirajut jetu professiju i chto ih motiviruet ostavat’sja v nej?” Analytical report “Teachers of Kazakhstan: Why young people choose this profession and what motivates them to stay in it?” Astana: Public Association “Centre for Analysis and Strategy Beles. p.126

Karabassova, L. (2021) English-medium education reform in Kazakhstan: Comparative study of educational change across two contexts in one country. *Current Issues in Language Planning*, pp.1-21. DOI: 10.1080/14664208.2021.1884436.

Karinova, S. (2021, March 1). [Facebook]. https://www.facebook.com/permalink.php?story\_fbid=705770693427504&id=100019837397965&\_rdc=1&\_rdr

Kataeva, Zumrad. and DeYoung, Alan. J. (2017) Gender and the academic profession in contemporary Tajikistan: Challenges and opportunities expressed by women who remain. Central Asian Survey, 36 (2), pp. 247-262.

Kovyazina, K., Boranbay, M., Beysembayev, S. (2020) Distancionnoe obrazovanie v Kazakhstane glazami uchiteley i ekspertov: vyzovy b vozmojnosti [Distance education in Kazakhstan through the eyes of teachers and experts: challenges and opportunities]. Paper Lab.

Kurmangaliyev, A. (2019) The impact of ICT on the teaching and learning processes of rural schools in Kostanay Region. Unpublished Master’s Thesis. Kazakhstan: Nazarbayev University.

Lillis, J. (2021) *Kazakhstan:* *Vaccination campaign proceeds at snail’s pace. Only 0.25 percent of the population aged over 15 have had the first injection. Eurasianet.* Available at: <https://eurasianet.org/kazakhstan-vaccination-campaign-proceeds-at-snails-pace> (Accessed: 2 April 2021).

Liter.kz.(2021) *Strict quarantine extended in Almaty: schools will switch to remote learning.* *Liter.kz*. Available at: [**https://liter.kz/strogij-karantin-prodlili-v-almaty-shkoly-perejdut-na-udalenku/amp/**](https://liter.kz/strogij-karantin-prodlili-v-almaty-shkoly-perejdut-na-udalenku/amp/) (Accessed: 2 April 2021).

Marteau, J-F. (2020) Post-COVID education in Kazakhstan: Heavy losses and deepening inequality. [Blog] *World Bank Blogs. Eurasian Perspectives.* Available at: <https://blogs.worldbank.org/europeandcentralasia/post-covid-education-kazakhstan-heavy-losses-and-deepening-inequality#:~:text=Before%20COVID%2D19%2C%20six%20out,more%20students%20into%20functional%20illiteracy>. (Accessed: 16 November 2020)

MoES. (2020a*) Informatsiya dlya shkol'nikov, studentov, pedagogov i roditeley v period pandemii. Information for schoolchildren, students, teachers and parents during a pandemic*. Available at: <https://www.gov.kz/memleket/entities/edu/press/news/details/informaciya-dlya-shkolnikov-studentov-pedagogov-i-roditeley-v-period-pandemii?lang=kk> (Accessed: 16 March 2020)

MoES. (2020b) *O khode podgotovki k novomu 2020-2021 uchebnomu godu.* *On preparation for the new 2020-2021 academic year*. [Government webpage]. Available at: <https://www.gov.kz/memleket/entities/kdso/press/news/details/80745> (Accessed: 15 July 2020)

MoES. (2020c) *Startuyet besplatnyy onlayn-kurs dlya pedagogov strany «Uchus’ uchit’ distantsionno. A free online course for teachers of the country “Learning to teach distantly” starts.* [Government webpage]. Available at: <https://www.gov.kz/memleket/entities/kdso/press/news/details/81887> (Accessed: 21 July 2020)

MoES. (2020d) *Yedinoe Obsherespublikanskoye roditel’skoye sobraniye “Ob obuchenii detey v novom uchebnom godu. United General Repblican Parental Assembly “On teaching children in the new academic year.* [Government webpage]. Available at: <https://www.gov.kz/memleket/entities/kdso/documents/details/67134> (Accessed: 19 August 2020)

MoES. (2020e) *V Kazakhstane nachalsya novyy uchebnyy god. A new academic year started in Kazakhstan.* [Government webpage]. <https://www.gov.kz/memleket/entities/kdso/press/news/details/98137> (Accessed: 1 September 2020)

MoES. (2020f) *Po zayavleniyu roditeley razreshit’ obucheniye v dezhurnykh klassakh s 1 po 5 klassov. At the request of the parents, allow training in the duty classes from 1 to 5 grades*. [Government webpage]. Available at: <https://www.gov.kz/memleket/entities/kdso/press/news/details/114502> (Accessed: 27 October 2020)

MoES. (2021) *70% schkol’nykh predmetov v vypusknykh klassakh budud izuchat’sya v tradiditsionnom formate v shkole. 70% of school subjects in graduation classes will be studied in traditional format at school.* [Government webpage]. Available at: <https://www.gov.kz/memleket/entities/kdso/press/news/details/151872> (Accessed: 12 January 2021)

Montacute, R. (2020) *Social mobility and COVID-19: Implications of the Covid-19 crisis for educational inequality*. UK: The Sutton Trust.

OECD (2015) *Students, Computers and Learning: Making the Connection, PISA*. OECD publishing. Available at: <https://doi.org/10.1787/9789264239555-en>

OECD. (2017) *Gender policy delivery in Kazakhstan. OECD Public Governance Reviews.* Paris: OECD. Available at: <https://doi.org/10.1787/9789264280359-en>.

OECD. (2019) *TALIS 2018 Results (Volume I): Teachers and school leaders as lifelong learners.* OECD Publishing. Available at: <https://doi.org/10.1787/1d0bc92a-en>

Ogurtsov, I. (2020) *Early holidays announced for schoolchildren of Kazakhstan from March 16 due to the threat of coronavirus.* *Liter.kz.* Available at: <https://liter.kz/s-16-marta-dlya-shkolnikov-kazahstana-ob/> (Accessed: 21 May 2020).

Palandjian, G., Silova, I. Mun, O. & Zholdoshalieva, R. (2018) Nation and gender in post-socialist education transformations: Comparing early literacy textbooks in Armenia, Kazakhstan, Kyrgyzstan and Latvia. In Chankseliani, M. & Silova, I. (Eds). *Comparing post-socialist transformations: Purposes, policies, and practices in education*. Symposium Books Ltd.

Seilkhanov, A. (2021) *Kazakhstan’s 3 areas in ‘red zone’ for coronavirus. KazInform. International News Agency.* Available at <https://www.inform.kz/en/kazakhstan-s-3-areas-in-red-zone-for-coronavirus_a3767303> (Accessed: 22 March 2021)

UNDP (2020) *Tackling social norms: A game changer for gender inequalities*. New York: UNDP.

UNESCO (2006*) Education in emergencies: The gender implications*: Advocacy brief. UNESCO, Bangkok.

UNESCO. (2020a) *Global education coalition*. Available at: <https://en.unesco.org/news/137-billion-students-now-home-covid-19-school-closures-expand-ministers-scale-multimedia> (Accessed: 23 May 2020

UNESCO (2020b) *A new generation: 25 years of efforts for gender equality in education. Gender report of the Global Education Monitoring Report*. <https://en.unesco.org/gem-report/2020genderreport>

UNESCO (2020c) *Policy brief: The impact of covid-19 on children*. <https://unsdg.un.org/resources/policy-brief-impact-covid-19-children>

UNESCO (2020d) *Policy brief: Education during COVID-19 and beyond*. Available at <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf> (Accessed 3 April 2021)

UNESCO (2021) *UNESCO figures show two thirds of an academic year lost on average worldwide due to Covid-19 school closures.* Available from: <https://en.unesco.org/news/unesco-figures-show-two-thirds-academic-year-lost-average-worldwide-due-covid-19-school> (Accessed: 23 March 2021)

UNICEF (2020) Protecting children and adolescents with disabilities from the pandemic: COVID-19 and children with disabilities in Europe and Central Asia. https://www.unicef.org/eca/protecting-children-and-adolescents-disabilities-pandemic

UN Women and UNFPA (2020) Rapid gender assessment (RGA). https://kazakhstan.unfpa.org/en/publications/rapid-gender-assessment-covid-19-situation-republic-kazakhstan

USAID (2020) *COVID-19 and education: Initial insights for preparedness, planning and response*. Available at: [file:///C:/Users/naureen.durrani/Downloads/COVID-19%20&%20Ed-%20Initial%20Insights%20for%20Preparedness%20Planning%20and%20Response%20%202020.03.12.pdf](file:///C%3A/Users/naureen.durrani/Downloads/COVID-19%20%26%20Ed-%20Initial%20Insights%20for%20Preparedness%20Planning%20and%20Response%20%202020.03.12.pdf)

Westbrook, J., Durrani, N., Brown, R. S., Orr, D., Pryor, J., Boddy, J. and Salvi, F. (2013) Pedagogy, curriculum, teaching practices and teacher education in developing countries. Technical Report. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, London.

Wijesinghe, T. (2020) *Connect and adapt to learn and live: Deaf education in Sri Lanka. The Education and Development Forum.* Available at: URL <https://www.ukfiet.org/2020/connect-and-adapt-to-learn-and-live-deaf-education-in-sri-lanka/> (Accessed: 13 May 2020).

Winter, L., Rimini, C., Soltanbekova, A. & Tynybayeva, M. (2014) The culture and practice of assessment in Kazakhstan: The Unified National Test, past and present. In: Bridges, D. (Ed.) *Educational reform and internationalisation: The case of school reform in Kazakhstan*. Cambridge: Cambridge University Press, pp.106-132

Yates, A., Starkey, L., Egerton, B. & Flueggen, F. (2020) High school students’ experience of online learning during Covid-19: the influence of technology and pedagogy. *Technology, Pedagogy and Education*. DOI: 10.1080/1475939X.2020.1854337. pp. 1-5.