



State Comptroller Of Israel | Special Report: The State of Israel's
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Welfare, Education, Health and
Employment Topics

Distance Teaching and Learning during the Covid-19 Pandemic Period



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Background

Since the outbreak of the Covid-19 pandemic in the world at the end of 2019, 186 countries, including Israel (encompassing overall students of 1.5 billion), closed the schools within their borders, either fully or partially, depending on the infection rate and the local decisions made. Some transitioned to distance learning. Distance learning is an advanced method usually conducted outside the school and primarily online using various shared media tools or in another digital space. Learning is carried out accompanied and guided by the teachers and independent study (distance learning). Distance learning can be conducted using different learning methods, and it is essential to integrate them.

In the past, the Ministry of Education operated a distance learning system during periods of national security events that limited the activities of educational institutions, for example, during "Operation Cast Lead" in the south of Israel. However, those events were limited in scope regarding geographical spread, duration, and restrictions imposed on the population. Until the Covid-19 pandemic period, defined for this report only, as extending from March 2020 to August 2021 (Covid-19 pandemic period), the education system in Israel never had to operate a distance learning system for the entire student population in Israel. As part of the efforts to stem the spread of the covid-19 in Israel, educational institutions were closed starting March 13, 2020. More than 1.8 million students in Israel transitioned to a state requiring distance learning for an extended time.

Infection rates during the Covid-19 pandemic period peaked on January 18, 2021, when daily new confirmed cases exceeded 10,000. In April 2021, the pandemic receded considerably, and the school system returned to regular operation. However, in June 2021, the pandemic reemerged and started to spread, with daily new confirmed cases surpassing 6,300 on August 9, 2021, raising concerns that the 2021/22 school year will open subject to restrictions and special conditions, which will not allow regular school learning.



Key figures

**1.87
million**

students learned in schools during the 2020/21 school year

**82
days**

in complete lockdown during which the education system operated by distance learning mode only, and 128 days of mixed-mode learning – at schools and remotely (March 2020 to February 2021)

70%

of schools (excluding schools from the ultra-orthodox Jewish sector) participated in the national drill for learning in a state of emergency, held in March 2020, a few days before the Covid-19 pandemic. This versus the Ministry's targets for the participation of all schools in the drill

22%

percentage of students who did not participate during the first lockdown in most or all the synchronous sessions¹ held by the schools

**55%–
80%**

of the students did not connect regularly or at all to the digital content on the content websites of content providers

111,691

number of average daily views of lessons transmitted by the National Broadcasting System in November 2020, compared to 376,197 in March 2020 – a drop of 70% in the number of views

32%

of the students' parents who answered the first parents survey conducted by the National Authority for Measurement and Evaluation in Education (in July – August 2020), felt that their children's anxieties and fears constituted a barrier to optimal distance learning. Consequently, it was difficult for them to have a free mind for studies, to a moderate, great, or very significant degree

49%

of the teachers who answered the first teachers' survey conducted by the National Authority for Measurement and Evaluation in Education (in July – August 2020), stated that they had not undergone professional development in the field of distance teaching in the two years preceding the Covid-19 pandemic outbreak

¹ Synchronous learning enables conducting a virtual classroom session in a video space. This allows its participants, teachers and students, to speak, hear and see one another.



Audit Actions

- From May 2020 to August 2021, the State Comptroller's Office examined the state's actions regarding distance teaching and learning at schools (primary and secondary) during the Covid-19 pandemic of March 2020 – August 2021. The examination was performed in the Ministry of Education. It should be noted that in October 2020, the State Comptroller issued an interim report on this topic, which dealt with "Computerization Infrastructures for Distance Learning and Alternative Learning Spaces during the Covid-19 Pandemic".

Key findings

- An international comparison of distance learning during the Covid-19 Pandemic period** – Figures from UNESCO's database on the status of the school, openings in 210 countries show that during the period March 13, 2020, to January 25, 2021, in approximately two-thirds of the countries surveyed, schools were fully open significantly more days than in Israel. Likewise, out of 23 selected countries, the number of days the education system was closed in Israel (92) or partly open (96) – a total of 188 days was among the highest. The number of days the education system in Israel was fully available to all students in 2020 (45) was almost the smallest.
- Preparations for distance learning in a state of emergency** – Many of the challenges accompanying distance learning in the education system during the Covid-19 pandemic were disclosed in the annual emergency drills held by the Ministry since 2016 and were partially resolved over the years. The problems that arose included: under-participation of schools and students in emergency drills, a lack of focus on synchronous tools, and a shortage of end-user equipment for students. At the end of the third lockdown, there was still a shortage of end-user equipment for students and a shortage of infrastructure. These posed a barrier to distance learning. The Ministry of Education still does not have an accurate picture of the scope of the need and the identity of those students who lack end-user equipment.
- Ministry of Education directives during the Covid-19 Pandemic period** – During the Covid-19 pandemic, challenges arose regarding the implementation of the directives issued by the Education Ministry concerning the opening of the education system. This resulted from multiplicity's circulars and directives, their complexity, their distribution close to the time of implementation, and the necessity to customize circulars for unique populations.



📌 Synchronous learning – The Ministry of Education did not require a quantitative report from the schools regarding the extent of student participation in synchronous distance learning. Thus, it lacked data to enable monitoring implementation of its directives, analyze the data, draw conclusions, derive lessons for optimizing this learning method, and act to remove the barriers preventing the optimal performance of synchronous learning. The first parents' survey conducted by the National Authority for Measurement and Evaluation in Education indicates that 22% of students did not participate in most or all the synchronous sessions held by the schools. Among the responders whose children participated in most or all the sessions, the percentage of Arabic speakers was lower than that of Hebrew speakers (69% versus 81%). The rate of young students (grades 1–6) who participated was lower than that of students from the upper grades (7–12) in both populations. The second parents' survey indicated an 11% decline in the percentage of students who did not participate in most or all of the synchronous sessions held by the schools. The audit found that synchronous learning was not suitable for all students, for example, students who have difficulty with this type of learning, which requires excellent concentration (including students of a young age). There were too many synchronous lessons. Likewise, it was found that the Education Ministry had failed to issue a directive clarifying whether it is mandatory or optional to activate the cameras in the students' end-user equipment and, if it can be mandated, what government agency is authorized to make this requirement.

📌 Asynchronous learning² – The Ministry's tracking of e-learning assignments – The Education Ministry collects quantitative data on the number of student entries into the digital content websites of the content providers with which it has contracts. However, it does not analyze the data available to it to evaluate the benefit derived from using e-learning assignments. For example, it does not examine the website entry data by district, age bracket, or sector. The Ministry does not have qualitative data on the use made by students on entering the websites (for instance, what the students do after they enter the website, how long they stay on each page, how well they do on their e-learning assignments, etc.). It also has no quantitative data on student participation in all the e-learning assignments given by the schools.

📌 Entry into the websites of digital content providers containing e-assignments – It was found that in the period March 2020 to December 2020 (except for the months July – August when students were on summer vacation), 55%–80% of the students did not link up regularly or at all, with the digital content on the content websites of the content providers. The usage in the ultra-orthodox Jewish and Bedouin communities was proportionately lower than in the general Jewish and national-religious Jewish sectors. And the lower the socio-economic cluster, the smaller the usage of digital content sites.

2 In distance learning the main interaction is between the learner and the learning materials, for example, learning materials on the Internet. Such learning is independent and done from the student's computer at school or at home, at all hours of the day. It is available via the National Broadcasting System.



The National Broadcasting System³ – Since the Covid-19 pandemic outbreak, the Ministry of Education invested NIS 20.2 million to expand the number of videotaped lessons. This, despite the data available to the Ministry, indicated a decline in the number of views from 376,000 in March 2020 to 112,000 in November 2020. In addition, the conclusion-drawing processes showed that a fair proportion of the teachers had not instructed their students to view the lessons. The increase in the number of videotaped lessons was not accompanied by a quality check (at both the pedagogical and technical level) during the second and third lockdowns. In this regard, a revision of the lesson plans was not considered. No consultation with teachers was performed to assess whether the need to videotape more lessons, and if so, whether the students, who were the target audience, make optimal use of the National Broadcasting System. The Ministry also failed to identify and remove the barriers facing students from specific populations such as the Bedouin population in using the National Broadcasting System.

Parent involvement in distance learning – The principal populations hurt by the lack of parental support in distance learning were students from the socio-economic and cultural periphery whose parents had economic difficulties, and students with parents from the ultra-orthodox Jewish (Haredi) community and Arab community, with emphasis on the Bedouin community. The achievements of students from a lower socio-economic background and Arabic-speaking students are more lacking in routine times than those of the general student population. Distance learning, one of the advanced learning tools included in the schools' learning toolbox, may deepen the divide among students of different populations.

Student dropout during the Covid-19 Pandemic period – Researchers in Israel and worldwide estimate that the dropout phenomenon⁴ is likely to worsen in the wake of the Covid-19 pandemic and the shift to distance learning. It will also appear in populations not previously defined as at risk for student dropout. Nevertheless, the Education Ministry did not collect the schools' monitoring data on students' attendance and active participation in distance learning lessons. It lacked complete data for the entire education system on hidden dropouts and students who ceased contact with their schools during the Covid-19 pandemic and the year preceding it.

Study and social sessions in alternative settings during the Covid-19 Pandemic period – Throughout the Covid-19 pandemic period, difficulties arose concerning the emotional and social state of the students, which were hard to identify

3 A system that started to operate with the outbreak of the pandemic in March 2020, in which framework lessons were videotaped for all age groups (from kindergarten children to twelfth grade students) in the Hebrew and Arabic languages, and broadcast on various platforms.

4 Overt dropout is a student who previously enrolled in an educational institution but no longer enrolled there. Hidden dropout is a student who is enrolled in an educational institution but is absent from lessons for a defined period or a student. One of the following characterizes this student is: loitering on and outside the school premises during school hours, lack of learning functioning, difficulty following the school's rules, adjustment and behavioral difficulties, low involvement in studies and other school activities.



and address. These difficulties pointed to the students' need for social meetings with classmates and frontal sessions with teachers. Problems emerged that prevented the schools from exhausting the potential inherent in learning and holding sessions in alternative settings. It was contended that the issue of learning in alternative settings had not been managed according to a well-structured doctrine. Additionally, there was difficulty in bringing the students and teaching staff to the meeting places in the alternative settings and difficulty locating suitable settings in the school or within the local authority area. The Ministry of Education recruited jobseekers and unemployment benefit recipients to work in the education system, primarily to split classes at primary schools (with emphasis on grades 3–4, conducted in-person). They were not part of the teaching staff for learning in alternative settings or working with the age brackets that spent little time in frontal instruction at school. These were mainly students of the upper grades who comprised the bulk of the students who did not arrive at the schools and had great potential for learning in alternative settings.



Training teachers for instruction in distance learning – The level of teacher training for distance learning instruction before the Covid-19 pandemic constituted a barrier to the teachers' readiness for this type of instruction with the outbreak of the covid-19. From the second teachers' survey conducted by the National Authority for Measurement and Evaluation in Education (in February – March 2021), it emerged that in February 2021, 20%–25% of the teachers felt that they had acquired the necessary tools and capabilities for distance teaching to a moderate degree or more minor. 32% of the teachers stated that the professional development they had participated in during the Covid-19 pandemic period contributed to their acquisition of the necessary knowledge and skills to a moderate degree or more minor. The Ministry does not have a complete database on the training of teachers in general and on the training for distance teaching in particular. It does not centralize all the data on the teachers' training sessions, particularly the training sessions for distance teaching. Owing to technological limitations, the Ministry does not analyze the data on teachers' training according to the characteristics of the teachers trained or according to a specific school.



The Ministry of Education provided end-user equipment for the population in need of it, meeting the targets set by the Education Minister, mentioned in the Ministry's response to the State Comptroller's interim report from October 2020⁵.


With the outbreak of the Covid-19 pandemic, and before the commencement of the school year 2020/21, the Ministry of Education prepared to train teachers for instruction by the distance learning method.


5 State Comptroller and Ombudsman, Interim Report on the State of Israel Response to the Covid-19 Pandemic (2020), Chapter on "Computerization Infrastructures for Distance Learning and Alternative Learning Spaces during the Covid-19 pandemic."




During the Covid-19 pandemic period, the Education Ministry implemented actions to improve student participation in distance learning, draw lessons from its actions, and examine ways to turn the Covid-19 pandemic into an opportunity.

Key recommendations

 **Preparations for distance learning in a state of emergency** – The State Comptroller recommends considering a multi-year format for designing emergency drills. The drills will regularly examine various in-depth scenarios determined by the Ministry of Education. Likewise, the Ministry should consider that distance learning in a time of emergency does not offer a solution or substitute only for short-term frontal education in localized national security situations but also in ongoing, extensive states of emergency. Therefore, the Ministry should also drill the type of learning that typifies such cases. In cooperation with the relevant professional bodies, it is recommended that the Ministry complete mapping the end-user equipment lacking among the students and teachers, computers and phones, and act to rectify the shortfall. Additionally, the Ministry should map end-user equipment needs yearly to identify shortfalls.

 **Ministry of Education directives during states of emergency** – The Ministry of Education should prepare a complete and fixed format for disseminating procedures in a time of emergency. It will address all difficulties that have arisen in this matter. This may be similar to the framework of the "Learning in Safety" framework, a dedicated website that centralized all the guidelines (including health guidelines, lifestyle guidelines, pedagogical guidelines). The Ministry should continue reducing the number of circulars issued. They should be focused, and the appropriate timing for disseminating the guidelines must be determined. For example, at the start of the workday or several days before the date set for their implementation. This will enable the schools to make proper preparations. In addition, the Ministry should consider allowing the schools and local authorities to act at their discretion on some issues according to the schools' needs and their students' characteristics.

 **Synchronous learning** – Besides issuing guidelines to school principals, the Ministry of Education should collect data on student attendance in synchronous learning to formulate a complete picture of student participation in this learning method. Providing a comprehensive view will facilitate analyzing and optimizing the synchronous distance learning method and adapting it to suit students' characteristics. This, in turn, will improve the rate of student participation in this learning method, primarily in an emergency. Likewise, the Ministry should determine the most efficient way for collecting data for analysis. Data analysis will also enable identifying a connection between students' characteristics (age, sector, geographical area, etc.) and participation rate in this learning method, identifying problematic issues, revising programs as necessary, and providing tools and assistance to schools to ensure maximum student participation in



distance learning. The Ministry should also consider the possibility of drafting a recommended format for synchronous distance learning according to student age, regarding the number of instruction hours and duration of each lesson. Following the recommended configuration, school principals would be advised to adjust the lesson schedule to suit the unique characteristics of their respective schools and students.



Asynchronous learning – E-assignments – The Ministry should track student participation rates in e-assignments over time for all existing computerized channels, draw conclusions accordingly, and create a toolbox to help boost the rate of student participation in these assignments. The Ministry should also develop systems that facilitate qualitative data collection, generate the data and analyze them. This will provide the Ministry of Education with a comprehensive picture of students' use of the e-assignments tool in distance learning during times of routine and emergency. In addition, the Education Ministry should analyze the reasons for the low participation rate in the e-assignments on the websites of the digital content providers. The analysis should emphasize the disparities among various populations and socio-economic clusters. This is despite the steps taken by the Ministry as specified in its response. The Ministry should also draw lessons in this regard and remove the barriers facing these populations.



The National Broadcasting System – The Ministry of Education should draw lessons regarding the National Broadcasting System, mainly given the decline in its viewing rates and teachers' improved distance instruction capabilities. In this regard, the Ministry should consult with Ministry headquarters officials, Ministry district offices, and the field staff – principals, teachers, and students – to get a comprehensive picture regarding the contribution of the National Broadcasting System to distance learning. This information will enable the Ministry to make decisions regarding the need for the continued activities of the system while considering its advantages and drawbacks.



Student dropout during the Covid-19 Pandemic period – The Ministry of Education should collect the hidden dropout data from all the schools, besides the overt dropout data it routinely gathered before the Covid-19 pandemic outbreak, and analyze the data. It should determine the reasons for students not participating in distance learning. Likewise, the Ministry should decide on an auxiliary tool to help it identify, as early as possible, the students at risk of dropping out and intervene to prevent this.



Study and social sessions in alternative settings during states of emergency – The Ministry of Education should complete examining the difficulties raised by the school principals concerning conducting learning in alternative settings and provide a suitable solution for them. Further, the Ministry of Education, in conjunction with the Federation of Local Authorities in Israel, the local authorities, and schools, should prepare a program to be activated when the need arises, including in a time of emergency, designating local authority alternative settings in outdoor areas and alternative school structures. The Ministry should also assess the barriers to expanding learning in alternative settings and the resources needed for this purpose. It should formulate a program for learning in alternative settings in collaboration with the Finance Ministry, Culture and Sports Ministry,



Federation of Local Authorities, and the Employment Service. They should also consider hiring, in this framework, suitable jobseekers and unemployment benefit recipients with the necessary skills to fit into the education system, at least in times of emergency. At these times, the education system shifts to distance learning, and the proportion of such employees in the system is likely to be significant.



Training teachers for instruction in distance learning: The Ministry should act to complete the characterization of the system for managing the learning processes of teaching staff and complete its development and implementation. This system should centralize the data concerning staff training sessions and create a situation report of the teachers' training and professional development. The system will facilitate constructing avenues of personal growth for each worker based on individual needs. This, in turn, will enable building a tailored training program for the worker. A complete database and computerized system will allow optimal teachers' training and development processes, including distance learning. It is further recommended that the Ministry act to have the field of distance teaching and learning incorporated into the framework of teacher training, map the skills and qualifications the teachers need to develop for distance teaching, consider the development of courseware suitable for training teachers, and encourage excellence in this field. Finally, the Ministry should continue to monitor the contribution of the training undergone by the teachers to the quality of distance teaching and improve them where needed.



Matriculation examinations – The Ministry of Education should study the recommendations of the Tirosh⁶ Committee regarding external matriculation exams, and particularly the need to limit them. The Ministry should view these recommendations in the context of its perception of the effective way to evaluate students' achievements. Since this is a fundamental issue with broad effects, it is appropriate that the Ministry consider including consultations with a spectrum of stakeholders in the domains of education and knowledge, governance, employment, and the third sector. Their input can enrich the viewpoints on this issue, as recommended by the State Comptroller in his March 2021⁷ report on the changing labor market

6 External examination committee for examining the implementation of the matriculation exams in 2020 and determining an outline for the implementation of the tests from 2021 and onward

7 State Comptroller and Ombudsman, Annual Report 71B (2021), Volume: "The Changing Labor Market," Chapter: "Preparation of the Education System for the Changing Labor Market," p. 43



Distance Learning in the U.S., with the Outbreak of the Polio Epidemic, 1937 (right), and Current Distance Learning, March 2020 (left)



Source: Pexels website



Source: Bettmann/Getty Images

Summary

The Covid-19 pandemic, which spread throughout the world at the end of 2019, has created an emergency of a scale and intensity not experienced in recent decades and has affected the education system. The Covid-19 pandemic and distance learning have exposed and increased the inequality existing in the education system. Given the data presented in this report, the Ministry of Education should ascertain that distance learning is conducted optimally in light of the concerns over the growing social and learning divide among students. This will provide an educational, social, and emotional solution for all students in the State of Israel while emphasizing special populations. It is recommended that the Ministry continue to promote efforts to turn the Covid-19 pandemic into an opportunity and create a basis for changing the education system and adapting it to the 21st century, particularly about distance learning in times of routine and emergency.