

Opportunities and Risks to the Education System in the Time of the Coronavirus: An Overview

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Introduction

The education system, like other social systems, in Israel and in other countries, is currently responding to the coronavirus crisis. The first stage of the crisis was characterized by a full lockdown as a result of the coronavirus pandemic, which included the closure of schools. The second stage was a brief respite and almost complete return to routine, in the belief that the crisis had passed. The third stage, which began with the second wave of the disease, and which is still ongoing at the time of writing, is a return to lockdown with varying levels of intensity and in which the pandemic is still not under control. There may be additional stages in the near, and perhaps far, future. Currently, the main effort is devoted to issues of immediate concern. However, attention should also be devoted to the future implications of the crisis, which differ significantly from previous ones.

This document relates primarily to the implications of the full lockdown, although large parts of it are also relevant to situations of partial or full operation of the education system during the pandemic and also after it has passed. The main change in the operation of the education system in light of the efforts to deal with the coronavirus pandemic is not the prolonged interruption of learning, since the schools operate for only nine months of the year in normal times, due to the summer vacation and breaks during the school year.

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The difference is in fact between the operating methods of the education system that have been the convention for hundreds of years, and the new situation, which can include periods during which the system must quickly adjust to developments with which it has little, if any, experience. This fact requires flexibility from the education system allowing it to adjust rapidly to changing conditions.

The first stage of the crisis — a full lockdown — had several unique characteristics that deserve a brief description:

- The totality of the situation. Normally, during a school holiday there are alternative activities available: summer camps, extracurricular activities, summer jobs in the case of older students, etc. During the general lockdown in the first wave, none of these activities were available.
- Being confined indoors for an extended period. Usually, adults and even more so children, spend time outside in the garden, in the park, on the beach, or simply out in the street. During the coronavirus lockdown, everyone was confined indoors.
- All of the family is at home. Normally, at least one parent is at home with the youngest children or they are in some type of daycare. During the coronavirus lockdown, everyone was at home.
- Uncertainty. In normal situations, everyone knows when things start and when they end, and they can plan their activities accordingly. No one knows when the current crisis will end.

In the short run, the most reasonable solution to maintain the functioning of the education system in lockdowns of this type — where the simplest goal is the imparting of knowledge — is remote teaching and learning. In the intermediate and long runs, and on the assumption that situations such as these will be rare but nonetheless possible, the solutions will involve the creation of an educational work environment that combines safety in the school with remote teaching and learning, allowing for a rapid shift from a complete lockdown to a partial one or to normal activity without any restrictions.¹

1 Remote teaching includes all types of teaching and learning that occurs outside the school, whether it is based on electronic means or any other. It is important to emphasize that this is a not a new and unfamiliar phenomenon. Many organizations, both in Israel and abroad, have been evaluating and developing these methods for 20 years or more. The most prominent players in Israel are, of course, the Center for Educational Technology (*Matach* in Hebrew), which is working in partnership with the Ministry of Education and the Open University.

Preliminary insights into the effect of the coronavirus crisis on the education system

The full lockdown (and in most cases also the partial one) that was imposed to stop the spread of the coronavirus pandemic in most countries led to the closure of schools. At the beginning of April, the number of students not attending school stood at 1.16 billion in 194 countries (Ben Avot, 2020).

The lockdown also led to an increased use of remote teaching, which, in the absence of other solutions, constituted and continues to constitute an efficient temporary solution in certain locations and for certain age groups, though it is less efficient in other locations and for other age groups. The lessons that will be learned from the new educational reality, which can be viewed as an unplanned but nonetheless important socio-educational experiment, will have a decisive effect on the decision of whether remote teaching will continue to be an integral part of the education system once there is a return to normal times, and, if so, in what form and to what extent. As things look now, it is likely that remote teaching and learning, which is possible thanks to rapid technological innovations, will become part of the educational process and preparations should be made that will leverage its advantages and minimize its disadvantages.

This document will present preliminary insights into the Israeli education system's response to the coronavirus crisis particularly during the full lockdown. We will do so based on our limited ability to predict the future, focusing on four groups: students, teachers, the Ministry of Education, and parents.

A. The students

Dealing with general issues related to a general lockdown

The discussion of the implications of school closure in response to the coronavirus crisis can be divided into two: the implications of the school closure over time and the implications of using remote teaching as a tool to deal with the reality of school closures. The discussion is divided into two: the effect of school closure as a result of the lockdown imposed on the general population and the effect of the interruption of studies in the schools when the adult population is not in lockdown. We will start with the effect of being in lockdown for an extended period.

As mentioned, even in normal times, schools are closed for between three and three and a half months per year — two months during the summer and the rest during shorter school breaks. This reality is primarily the result of a long tradition shared with most other countries. In general, there is a consensus among researchers that the summer break is accompanied by a “summer learning loss” which is greater among students from weaker socioeconomic backgrounds (Anderson, 2020; Kuhfeld et al., 2020; Kuhfeld & Tarasawa, 2020). However, there have been studies published recently that question this widely held belief or at least present a more modest estimate of the educational loss (von Hippel, 2019).

The question is what effect a longer break, with its unique characteristics as described above, in addition to the “regular” breaks, will have over time. On the assumption that an extended closure of the education system — which according to its narrow definition includes Grades 1 through 12 (ages 6–17) and according to its broader definition also includes preschool and post-secondary education (ages 0–25) — can lead to a loss of knowledge and skills in the long run, it can have wide-ranging implications on the individual and national levels (although this widely accepted concept requires more evidence than is currently available).

Several studies have recently been published that attempt to estimate the long-term damage of the coronavirus pandemic. Many of them are based on earlier and recent work done by Hanushek and Woessmann (2015) who link academic achievement to the annual rate of growth in GDP per capita (Azevedo, Hasan, Geven, Goldemberg & Iqbal, 2020; Hanushek & Woessmann, 2020; Psacharopoulos, Patrinos, Collis & Vegas, 2020). Other studies have tried to estimate the damage to human capital as the result of war (in Germany and Austria) (Ichino & Winter-Ebmer, 2004; Akbulut-Yuksel, 2009); of extended closures of the education system due to the Cultural Revolution in China (Meng & Gregory, 2007); of long teachers’ strikes in Belgium, Canada, and Argentina (Belot & Webbink, 2010; Baker, 2013; Jaume & Willen, 2019); of extreme weather conditions (Goodman, 2014); and of natural disasters (Picou & Marshall, 2007; Andrabi, Daniels & Das, 2020). Most of the findings indicate that on an individual level, those who suffer from a prolonged interruption in their schooling study and have lower achievement levels in an academic or professional career. These outcomes apply to most students (at least in the short run), but students from strong backgrounds usually make up for the loss quite quickly, while students from weaker backgrounds have a hard

time making up for the loss, and as a result the damage remains long term. On a national level, the majority of studies indicate a slowdown in the annual growth of the economy.

A recent publication of McKinsey and Company, an American consulting firm, which twice examined the profile of countries that are more successful on the PISA exams, looked at the expected effect of the school closure and remote teaching. The examination related to three variables: the duration of the closure, the quality of remote teaching, and the background data of the students. The study describes several possible scenarios for school interruption starting in March 2020 as a result of the coronavirus crisis (Dorn, Hancock, Sarakatsannis & Viruleg, 2020):

1. A return to regular operation of schools in August 2020, January 2021, or August 2021, where learning continues remotely on a reasonable level during the interruption;
2. A return to regular operation of schools in August 2020, January 2021, or August 2021, where learning continues remotely on an intermediate level during the interruption;
3. A return to regular operation of the schools in August 2020, January 2021, or August 2021, where learning continues remotely on a low level during the interruption;
4. A return to regular operation of schools in August 2020, January 2021, or August 2021, without any remote learning.

The study findings indicate that the shorter the interruption of studies and the higher the level of remote learning, the smaller will be the loss in academic achievement. In the situation in which the return to school is only in January 2021 and there is no remote learning, the loss in academic achievement will range from 12 to 14 months of learning or in other words more than a full school year.

A more disturbing finding relates to the expected effect of an interruption of studies across various population groups where the gaps were found to be quite large. The average loss among white students is about six months of learning while among students from a weak socioeconomic background the loss is more than double that.

It is important to emphasize that losses resulting from school closures for long periods of time go beyond just the decline in academic achievement, and, as already said, are greater among students from weaker socioeconomic backgrounds (see Labaree, 2020). The damage done includes:

1. **Risk of violence.** For many students, and in particular (but not only) those from weaker socioeconomic backgrounds, the school is the space most protected from violence and other high-risk situations. Being forced to stay at home with their parents or older siblings can lead to a risk of physical, sexual, or verbal abuse. This danger intensifies with the level of economic stress that accompanies forced confinement at home. Indeed, there have been recent reports of an increasing number of requests for assistance to the welfare services (Lee, 2020a; 2020b).²
2. **Reduced auxiliary services.** Teachers, guidance counselors, and truancy officers who operate in the schools are an important source of information for welfare services and legal authorities about a student's level of distress in cases where intervention is necessary. School closures limit the efficacy of monitoring and the ability to provide assistance to at-risk students. This problem is exacerbated when those providing auxiliary services are also required to remain at home.
3. **Diminished social and other types of contact.** The school is one of the three frameworks in which children spend time during the day, the other two being home and after-school informal frameworks. The very ability to shift from one framework to another is important for mental health. Each of the other two frameworks meets social and emotional needs that are not met in the home environment — meeting with friends, playing with one's peers, and the like. If school closure is relatively brief, then the damage is perhaps not substantial but it increases with the duration of the lockdown.
4. **Less time devoted to learning activities.** Studies in England (Andrew et al., 2020) and Germany (Grewenig, Lergetporer, Werner, Woessmann, & Zierow, 2020) indicate that students who were at home during the lockdown devoted much less time to educational activity than during normal periods.

2 There are quite a few students who experience verbal and physical violence in school, but that is a separate issue that we will not deal with here.

This is particularly true among students from weaker socioeconomic backgrounds, as shown in the English study, and among the academically weaker students, as shown in the German study.

5. **Cancellation of school lunches, or in the best case a reduction in them.** In Israel, a large number of students participate in the school lunch program. For many of them, this is an important part of their daily nutrition and school closures represent a major loss for them (Tal-Spiro, 2017).³ The World Food Programme (WFP), which is involved in global food issues, has reported that during the coronavirus pandemic, 364 million children in 164 countries did not receive school meals.⁴
6. **Dropouts.** Even when a school is operating normally, there are students who are in danger of dropping-out for any number of reasons — poor school performance, poor social adjustment, and even economic factors. When schools are closed for a longer period, there is greater concern that these students will not return once schools open.⁵ One report presented the lessons learned from the closure of schools in Africa as a result of the Ebola crisis in 2014, according to which the drop-out rate increased, particularly among girls (Selbervik, 2020).
7. **School as a catalyst for social equality.** Labaree (2020) claims that school is usually also the main place where a student from a socioeconomically distressed background meets with students from stronger socioeconomic backgrounds and can enjoy a hygienic, well-maintained environment with normative conditions. It may also be the only environment where the student is the focus of attention.

3 According to Prof. Aron Troen who spoke on October 20th of this year before the Knesset Special Committee for the Rights of the Child, at this time there are 420,000 children and youth who are entitled to be a part of this nutrition program although not all of them participate in it. He noted that despite the rising need, in 2019, out of a total budget of NIS 929 million, only NIS 761 million was actually used (about 82 percent). With regard to program implementation during the lockdown, Prof. Troen said that at the time of the first lockdown, about 18,000 of those in need were provided for in their homes; at the time of the second lockdown, not a single child in need received assistance from the program.

4 See Global Monitoring of School Meals During COVID-19 School Closures at [WFP](#).

5 See Adverse Consequences of School Closures on the [UNESCO](#) website.

Dealing with academic difficulties by means of remote teaching and learning

In addition to the negative academic and social effects as a result of the loss of learning days, the steps taken by the system in order to overcome the forced interruption of learning — and in our specific case, remote teaching and learning — also have an effect on the situation. This influence is present even if learning takes place part of the time remotely and part of the time physically in the school (hybrid learning).

Remote teaching and learning — when carried out correctly and effectively — have many important advantages, both in a period of emergency and in normal times. In an emergency situation, when the schools are forced to close, remote learning is the primary solution that allows the schools to continue carrying out their most obvious function, namely the imparting of knowledge and academic skills. In normal times, it can be one of the main components in the process by which a student acquires self-learning skills and learns personal responsibility.

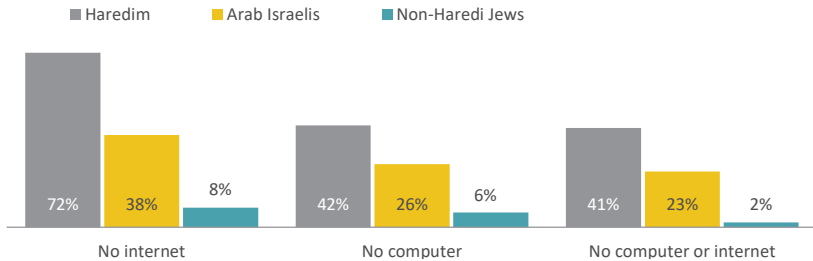
Nonetheless, it is important to be aware of the fact that under the currently prevailing conditions in Israel with respect to physical infrastructure and economic and educational capabilities, remote learning can only provide a solution — partial and imperfect — for students from stronger backgrounds. In contrast, it provides only a problematic solution or even an inferior one for large numbers of students, namely those from weak socioeconomic backgrounds.⁶ The reasons for this are clear. The access to remote learning, i.e., the number of computers in a home relative to the size of the household, the available bandwidth, the presence of quiet areas in which to concentrate, etc., is far more limited among families with a weak socioeconomic status; among some of them, there is no access at all.

Figure 1, which was presented in a document published by the Chief Economist of the Ministry of Finance, illustrates one aspect of the problem, even though it is not the only one nor perhaps the most important. It shows the differences in access to the digital infrastructure necessary for efficient remote learning across various population groups. It appears that even among non-Haredi Jews, there are groups without an internet connection (8 percent). Among the Haredi (ultra-Orthodox Jewish) population this rate reaches 72 percent while among Arab Israelis it is 38 percent. The share of students who

6 This is not unique to Israel. It was found in both the survey of Ben Avot (2020) and the report of the US National Academies of Sciences, Engineering and Medicine (2020).

have no access to either a computer or the internet is 2 percent among non-Haredi Jews, 23 percent among Arab Israelis, and 41 percent among Haredim.

Figure 1. Access to the internet and to a computer among non-Haredi Jews, Haredi Jews, and Arab Israelis



Source: Ministry of Finance, 2020, Figure 6s

It should be stressed that the increase in gaps that is the result of remote learning is not unique to Israel and has been reported worldwide. A concrete example of the inter-class differences in responses to the coronavirus crisis appears in an article that describes how private schools, which serve stronger populations, are able to stay open while public schools are forced to stay closed (Miller, 2020).

More well-off parents are better able to help their children understand the material conveyed by digital means. There are also reasons to believe that learning habits and the ability to concentrate and not be distracted when an adult is not present — abilities that are necessary in order to succeed at remote learning — are developed at an earlier age among students from stronger families. In view of these factors, the ability of students from weak families to benefit from remote learning is usually more limited and this is all the more so under the conditions of economic distress that characterize many households during periods of prolonged closures. Therefore, the ability of a less well-off household to meet the remote learning needs of a student is limited.

In sum, in the case of students, the safety net that online teaching provides in a crisis has some major gaps, and it is primarily students from weak socioeconomic backgrounds who fall by the wayside. This safety net is particularly flawed in the case of specific population groups, such as preschoolers, students with special needs, and youth at-risk. Among these

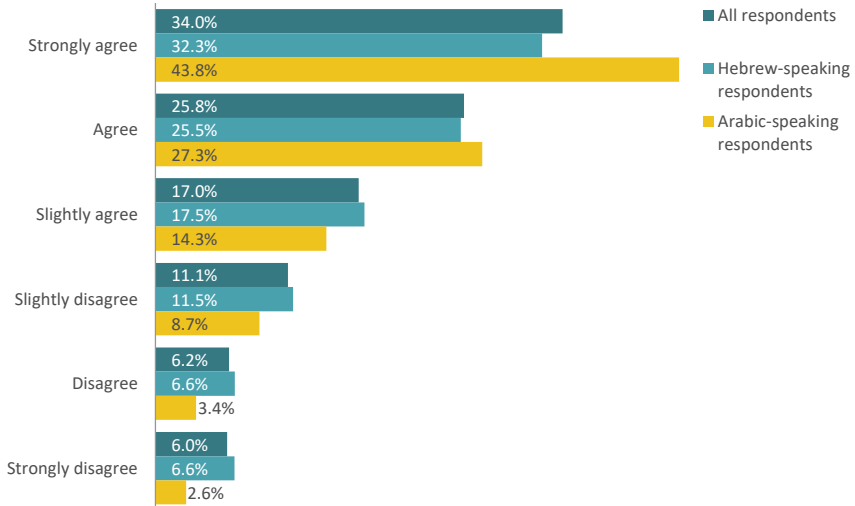
students, remote learning is hardly a substitute for the traditional school setting. The school, despite its deficiencies and the fact that it is a conservative institution whose goals include the continuity of the existing social regime, is still the institution with the greatest potential and ability to reduce social and academic gaps.

B. The teachers

The reality of remote learning can have far-reaching professional implications for teachers. We will describe a few of them as found during the crisis.

1. **Professional empowerment.** The advanced technology that is currently available and which facilitates online teaching, and primarily the necessity to use this knowledge, provides teachers with a more diverse toolbox than was previously available. This toolbox, if teachers continue to use it wisely after the crisis, can increase their professional skills and upgrade their professional status. Indeed, a survey carried out by the Taub Center, with the consent and assistance of the Israeli Teachers Union and which was answered by about 6,000 Jewish and Arab Israeli teachers, showed that 71 percent of the Arab Israeli respondents *“agreed”* or *“strongly agreed”* that remote teaching strengthens their professional abilities while only 6 percent *“disagreed”* or *“strongly disagreed”* (Figure 2). Among Jewish respondents, the figures were 58 percent and 13 percent, respectively (Taub Center, 2020).⁷

7 At this stage, we do not have an explanation for the relatively large difference between the Jewish and Arab Israeli respondents. The reason may be the lower average age of the Arab Israeli respondents.

Figure 2. The distribution of responses to the question:***“In retrospect, remote teaching has empowered me”***

Source: The Taub Center and Israeli Teachers Union survey

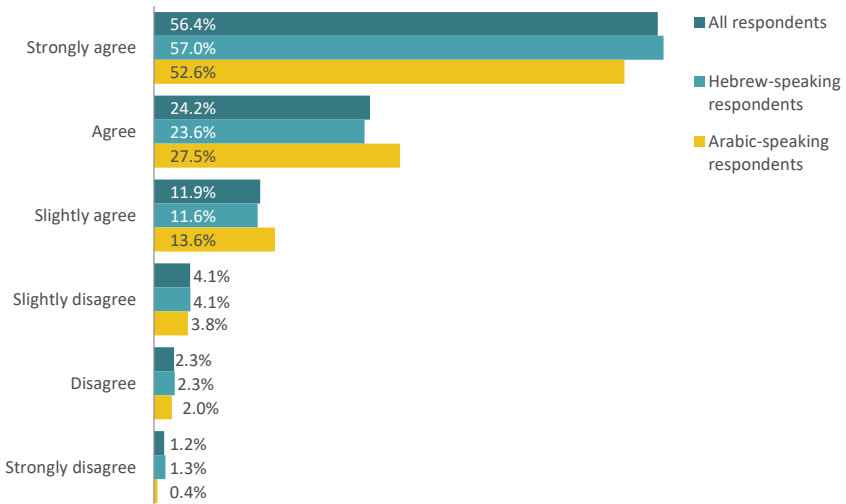
2. Increased professional autonomy. For many years, agencies such as *Matach*, the Open University, non-profit organizations, and commercial companies have been developing digital learning tools for the classroom and for online teaching. Despite their major investment and efforts, the tools they have developed have not become an integral part of the day-to-day educational experience in the education system. When the system shifted to remote learning and teaching, the principals and teachers were forced to adjust to the new conditions “on the fly.” To this end, they adopted — whether individually or as part of a group on the school level, the municipal level or the regional level — the methods that were most appropriate for them and for their students. This in practice led to a wide variety of approaches, lesson plans, and teaching methods unique to each teacher and group of students, and strengthened the teachers’ feeling of professionalism and autonomy. This was also confirmed in the teacher

survey. Most of the respondents (65 percent) feel that remote teaching strengthens their professional abilities and 43 percent feel that it reinforces their independence (Taub Center, 2020).

- A feeling of self-efficacy.** As a result of the teachers’ efforts, many schools now have an inventory of teaching material and teaching aids for remote teaching. These can contribute to the formation of teacher groups in the same age group, in the same school or in some other setting who exchange knowledge and experience among themselves for the benefit of the students and in order to increase their professional abilities. In this context, it is interesting that more than 80 percent of both the Jewish and Arab Israeli respondents “strongly agreed,” “agreed,” or “somewhat agreed” with the statement “I have learned to solve unexpected problems” (Figure 3) (Taub Center, 2020).

Figure 3. The distribution of responses to the question:

“In retrospect, I have learned that I am able to solve unexpected problems”

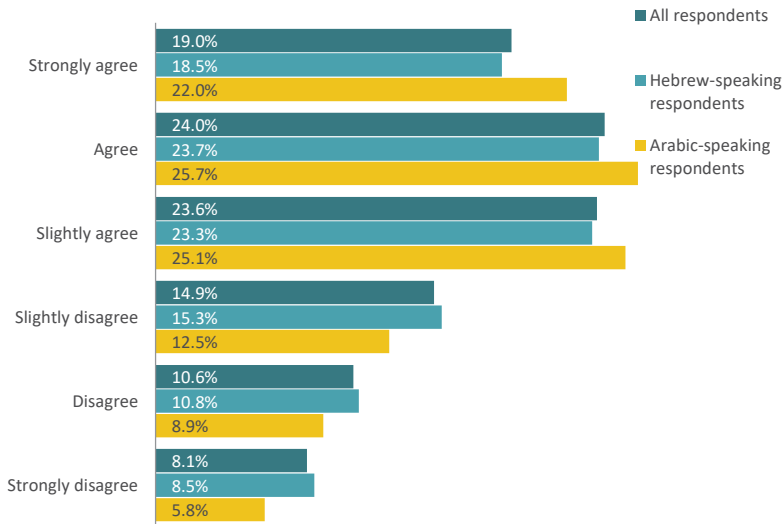


Source: The Taub Center and Israeli Teachers Union survey

4. **Creation of new channels of contact with students.** The transition to remote teaching, primarily in the case of online teaching, creates new opportunities for personal contact with students who the teacher may have been less attentive to in the regular classroom setting or who did not get the attention they needed in the classroom, due to the size of the class or for some other reason. Here, again, remote teaching had a positive impact overall, although it was less than in (2) and (3) above. About 48 percent of the Arab Israeli respondents felt that they are now more familiar with their students and their families while about 25 percent agreed with this to only a limited extent (Figure 4). In the Jewish sector, the figures were about 42 percent and about 23 percent, respectively. Interestingly, here again the opinions on remote teaching were more positive among Arab Israeli respondents.

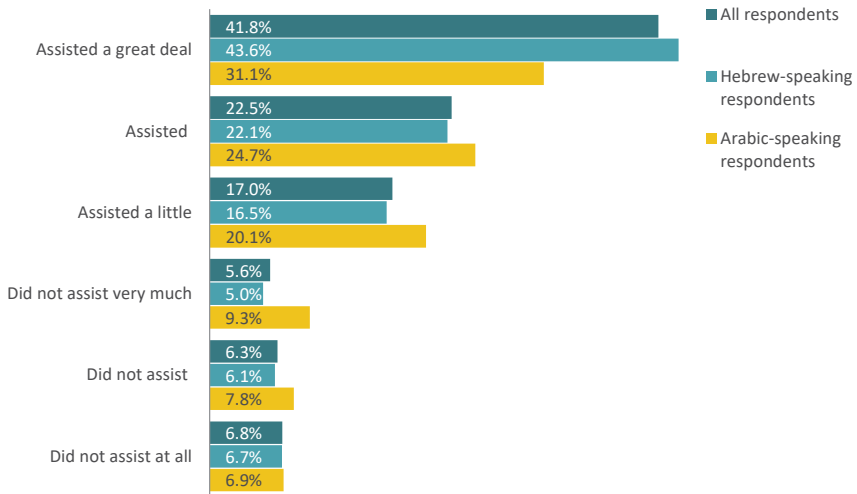
Figure 4. The distribution of responses to the question:

“In retrospect, I became more familiar with my students and their families”



Source: The Taub Center and Israeli Teachers Union survey

5. **Teaching without disciplinary problems.** One of the biggest problems for teachers in general is dealing with disciplinary issues. Obviously, this problem does not exist in online teaching. But offsetting that huge advantage is perhaps an even bigger problem, namely that of maintaining the students' level of interest and their willingness to continue participating in class, to follow the instructions of the teacher, and to carry out assignments. This is a true test of the teacher's professionalism, relative to the ability to maintain discipline in the classroom. Although the survey did not include a direct question on discipline problems, 60 percent of the respondents stated that their students found it difficult to maintain a high level of motivation and interest (Taub Center, 2020).
6. **Working as part of a team.** Effective teaching requires a variety of skills that not every teacher possesses. The ability of a teacher to view the lessons given by other teachers in the same school and even to the same class, to get new ideas for presenting the material, and to share lesson plans and teaching aids makes it possible to learn from colleagues to a much greater extent. There is also a major advantage in the possibility for a teacher to observe the lessons given by colleagues in her free time. Indeed, the results of the survey indicate that teachers got the most assistance from their colleagues (Figure 5). About 66 percent of the Jewish respondents and about 56 percent of the Arab Israeli respondents reported that their colleagues *"assisted them"* or *"assisted them a great deal."* In contrast, about 21 percent of the Jewish respondents and about 25 percent of the Arab Israeli respondents reported that they received the same level of assistance from the Ministry of Education.

Figure 5. The distribution of responses to the question:***“To what extent did your colleagues help you in online teaching?”***

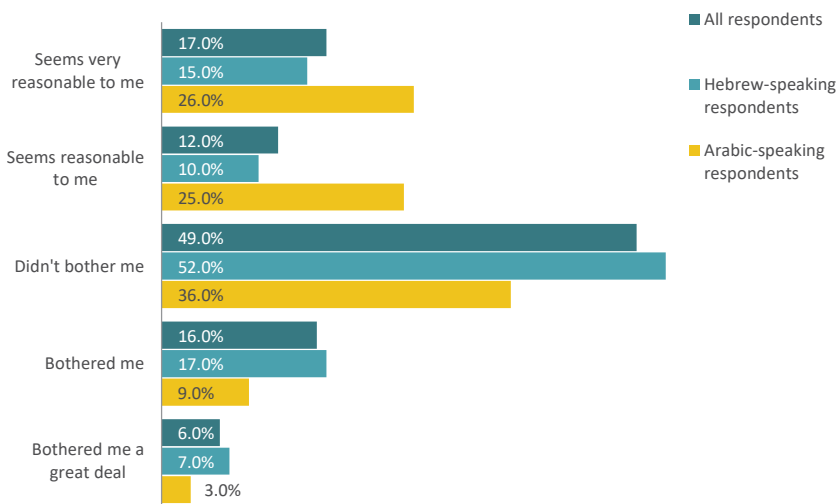
Source: The Taub Center and Israeli Teachers Union survey

7. Elimination of the classroom door as a barrier. Online interaction, whether recorded or live, creates a new reality in which teaching activities, and sometimes also educational interactions, between teacher and student becomes visible — there are those who would say “exposed” — to the parents and even more so to others, including colleagues, principals, supervisors, and heads of education departments. This has major implications. With online teaching, the era of mystery of what is going on behind the classroom door has come to an end. The parent may be sitting behind the student and watching the lesson, and is able to evaluate the pedagogical approach and the material being taught. However, it is important to emphasize that, in many cases, the parent does not have the proper tools for such an evaluation. Even the principal and/or the supervisor cannot assess the work of a teacher on the basis of a one-time physical observation of a lesson; it requires multiple observations and the input of other professionals. Observing online lessons gives the relevant players —

teachers, parents, principals, and supervisory agencies — improved tools for dealing with unjust criticism on the one hand and demands for salary increases on the other.

In view of this, it is interesting to examine the responses of teachers to the question of whether it bothered them that parents have the possibility of observing the lesson. A decisive majority of the respondents answered that it does not bother them, and many answered that *“it seems reasonable”* or *“very reasonable”* to be observed (Figure 6). The positive attitude toward this possibility is especially evident among the Arab Israeli respondents, with more than 50 percent of them relating to the issue positively or very positively. The reason may be that, in Arab Israeli society, the socioeconomic status of teachers and the prestige of the profession are higher than in Jewish society, and therefore it is less common to find a situation in which the parent has a higher status than the teacher and has little respect for the work that they do.

Figure 6. The distribution of responses to the question:
“What is your attitude toward the possibility that parents and others can observe the lessons you are teaching?”



Source: The Taub Center and Israeli Teachers Union survey

8. **The changing character and function of the teacher.** The increased role of remote teaching as a result of the coronavirus crisis may have far-reaching implications for the character of schools and its highly important role as the primary social environment in a student's life. Such a change also requires a major transformation in the perception of the teacher's role, in the methods of teacher training, and in the teacher's work routine. Teachers will have to shift from being figures of authority who convey information, rely on oratory, with the ability to punish and reward, to being the "responsible adult" who provides guidance and mentoring and helps students acquire knowledge and skills, and deal with the processes of growth, adolescence, and personality development in this critical stage of their lives. The institutions that train teachers will need to provide them with the tools and knowledge that are required in their encounters with youth who are likely to be highly familiar with the ins and outs of communication technologies and innovative data mining, but who lack the knowledge and life experience they need in interacting with their peers and the world of adults.
9. **Anchoring of remote teaching as an integral part of the teacher's work.** The integration of remote teaching within the teaching process also requires defining the part of remote teaching in the teacher's job. It is suggested that an hour of remote teaching be considered equivalent to an hour of frontal teaching and that the division of a teacher's hours be determined by an agreement between the principal and the teacher according to rules to be determined by the Ministry of Education.

In sum, it appears that in the opinion of the teachers — at least those who participated in the survey carried out by the Taub Center — the experience of remote teaching has, as a whole, been positive and it has created a major opportunity for their empowerment and for strengthening their capabilities (Taub Center, 2020). However, it also creates a complex challenge to learn new skills and it exposes teachers to parents and to their professional and administrative superiors, an experience that they may view as threatening. In general, and not necessarily in the context of the survey discussed here, the conclusions with respect to the efficacy of remote teaching according to pedagogical measures, and to an even greater extent emotional and social measures, are mixed and uncertain.⁸

8 A recent example is the opinion of Prof. Yair Amihai-Hamburger (see Detel, 2020).

C. The effect on the character and nature of the future school

As already mentioned, school closures for a lengthy period of time occur every year and even closure due to strikes is not all that uncommon. Therefore, the recent closure — at least the one during the first wave of the coronavirus crisis — should not, on its own, have an impact on the character and function of the school, nor on educational and pedagogical outcomes in the long run. Without the rapid and dramatic transition to remote learning and teaching — which is the result of the unique nature of the crisis and the new technological possibilities for remote learning with their implications for society and the economy that have become available to principals and teachers — the coronavirus crisis might have been viewed as a passing event of high significance while it was happening, but with little impact on the future. However, as things appear today, and if the formal education system will need to continue to function in a substantially different way from how it has functioned for many decades and even centuries due to the threat of recurring long lockdowns, it will have to transition to totally new and unfamiliar spheres. This will involve a configuration in which there is no longer just one teacher facing several dozen students who are essentially a captive audience in a physically demarcated space for defined periods of time interrupted by short breaks. The new learning reality will apparently be implemented under varying combinations of learning in school and learning outside school (at home, in public institutions, and in the community). The adoption of remote learning and teaching as a structured part of school activity can bring about significant changes. For example:

1. **Strengthening the social element.** The study of academic material is possible and for some of the students — particularly those with good study skills, a high level of curiosity, a supportive home environment, and a convenient computer and learning setup — it occurs under better conditions and is even more efficient under remote learning than in the traditional school setting. But what is missing in remote learning, and particularly during a lockdown, is interpersonal contact among students and between students and teachers. This kind of contact cannot be replaced by online learning or by telephone. If it becomes clear that remote teaching is efficient in the imparting of knowledge and academic skills for a growing share of students, then the place and function of the classroom and the school in this landscape will diminish. At the same time, the school will become increasingly important as the primary and most significant location for

interpersonal social encounters where young people can acquire social and emotional skills. Such a change in the school's function will require analogous changes in the work methods of teachers and in the division of functions between them and the rest of the school staff,⁹ in the organization of timetables, and in physical infrastructure. These transformations will not happen overnight and not even over the course of a year or two. It will be a long process, but apparently an inevitable one.

2. **Preserving social unity.** The modern school has an important role to play in preserving solidarity and social unity. In the words of Labaree (2010), the key feature of the new community school is not the curriculum or its pedagogy but rather its sense of community. It brings together young people in one building in which they have shared social and economic experiences despite class differences between them. It is likely that this function of the school will grow in importance as remote learning, which highlights status, social and other differences between students, becomes increasingly common. Extended lockdowns and the increasing use of remote teaching constitute a complex challenge to the education system, and in particular the public education system, to hold on to educated and more well-off parents who are liable to flee to private education and homeschooling. This is a phenomenon that is already occurring in parts of the US.¹⁰
3. **Cooperation with informal frameworks.** Such a dramatic change in the way that schools operate is liable to have an adverse effect on the activity and functioning of informal frameworks that currently operate in the afternoon and evening hours, including youth movements, volunteer activities, etc. Naturally, it will be necessary to find a way of coordinating between the school and these other frameworks.
4. **The connection with parents.** During the long weeks when schools were closed and remote teaching was in use, many parents became active partners in their children's learning process. The parents — and in particular those of younger children — were asked, and sometimes almost required, to ensure that their children were carrying out the instructions

9 It is possible, for example, to think about a configuration in which every adult will be responsible for a small group of students in the same age group or even of different ages.

10 See BVSD school board hears back-to-school, enrollment updates at [Daily Camera](#).

from their teachers and completing their assignments. At the same time, they are able to observe firsthand the work of teachers in its complexity and the knowledge required to carry out that work. The deeper familiarity of parents with the work of the teacher on the one hand and that of the teachers with the reality in the homes of their students on the other may have a major impact. The direction of this influence on the parents is unclear. The impact might be highly positive, by means of what is generally known as “increased parental involvement” in school life, or less positive if “parental involvement” occurs in processes and activities that they were not trained in and in which they lack basic knowledge. The effect of greater familiarity with the students’ parents — particularly those who live in difficult economic conditions and with interpersonal stress that is amplified by the lockdown — is also unclear. On the one hand, it can help the teacher to understand the conditions that are hindering the student’s learning and on the other hand it can lead to a shedding of responsibility and the attribution of the student’s failures to the conditions in his home.

5. **Partnerships with agencies outside the education system.** Since the closing of the schools, dozens of public bodies, non-profits, and commercial companies have assisted the education system in quickly and efficiently switching to remote teaching. It is likely that at least some of these initiatives will be shown to be effective and as having real potential to improve remote teaching also in the future, once the crisis has passed. The continuation of collaboration among all of the players can undoubtedly help the education system in the gradual integration of remote teaching in normal times.

D. The Ministry of Education

The onset of the coronavirus crisis meant that the Ministry of Education had to deal with a situation of great uncertainty; in response to demands by the country’s leadership and the public, they had to provide immediate solutions to a situation that no one could have predicted. It should have been clear to the public that under these conditions — and as long as the country is under lockdown — there is no possibility of operating the education system in a way that will simultaneously fulfill all three functions of the school: teaching, social interaction, and allowing parents to be involved in other activities, primarily work. This crisis, and the growing trend toward remote teaching that it triggered, have also emphasized the importance and centrality of the Ministry

of Education as the agent that determines the rules for the education system on the one hand, and its limitations as the operating agent in the field, on the other. It became clear that the local authorities, the school principals, and the teachers were in need of clear and timely directions, as well as professional and financial guidance, but the Ministry of Education's response was limited. As a result, the local authorities, the principals, and the teachers had to implement and improvise solutions on the local level, and in general they accomplished this with a fair measure of success.

The greatest failure of the Ministry of Education, regardless of the coronavirus pandemic, was the system's lack of preparedness for a long period of activity in a crisis situation involving the closure of schools. The State of Israel has experienced emergencies in the past that required large parts of the education system to close, and the frequent warnings of what is expected for the home front if another war is forced on it leave no room for doubt as to the necessity of a solid infrastructure for remotely operating the education system. The tools have been available to the Ministry of Education for many years. The means for active, interactive, and hybrid instruction were well known and well understood and the Ministry of Education even used them on a number of occasions when school was interrupted in the South. The management of the Ministry of Education and the entire education community were also well aware of the significant pedagogical potential in the use of remote learning even in normal times. However, very little was accomplished up until the crisis, and what was accomplished was not of sufficient scope in order to train teachers, prepare curricula, strengthen the computing infrastructure in the schools, and ensure that students from weaker socioeconomic backgrounds and the schools they attend have the equipment necessary for remote learning. The system was unprepared from an organizational and conceptual perspective to make remote teaching an integral part of the educational process, one that can be expanded or contracted as needed, while ensuring that gaps between the various population groups are not widened. The results of this failure have become clear during the lockdown, and it appears that they will have an effect on the functioning of the system also in the near future.

The failure to prepare the education system for a lockdown pales in comparison to the failure in managing the system during the lockdown and in the transition period following the lockdown. Instead of using the forced interruption of school activity and joining forces with the directors of the education departments in the local authorities, the teachers unions, parent

committees, and school principals in order to prepare effectively for reopening the schools, it chose to ignore them, in the best case, and, in the worst case, it generated confrontations with them. This failure reached its peak in a series of hasty, and sometimes illogical, decisions regarding the exit from the closure, both from the first and the second lockdown. These decisions were made and conveyed to those responsible for carrying them out at the last moment and sometimes even on the day that the managers of the educational institutions were meant to carry them out. Moreover, there were instances in which decisions were announced in the morning and canceled by the evening. This occurred against the background of a long-term policy of non-transparency that has been maintained almost without exception. The public had no way of understanding the logic of these decisions, knowing who made them, and who was consulted.

What needs to happen in the future when a full or partial closure is again imposed on the education system as part of a lockdown of the economy as a whole?

1. The period of the closure should be used effectively in order to arrive at understandings with the relevant players and, in particular, the teachers' unions, the local authorities, and the Ministry of Finance regarding teachers' employment arrangements both during and after periods of lockdown. A critical point in this context is the achievement of an understanding that an hour of remote teaching will be equivalent to an hour of frontal teaching. Teachers should not be required to teach full or part-time and be paid less than they would have earned under normal teaching conditions.
2. If a prolonged lockdown is imposed on the education system during the later months of the school year (say, around Passover), then agreement should be reached ahead of time with the teachers' unions that the summer vacation and the month of the High Holidays will be appended to the end of the lockdown period in order to allow everyone to get organized prior to the renewal of studies.¹¹

11 The timing of the lockdown has additional significance with respect to the efficacy of remote teaching. When a decision on the lockdown is made during the school year or near its end, teachers already know the students and are better able to monitor them and their issues. When the decision is made at the beginning of the school year, teachers are not yet familiar with their students and it is also difficult for them to ensure that students get the maximum benefit from their studies.

3. As long as bagrut (matriculation) exams are still given, it should be determined ahead of time what changes will be made to them according to the duration of the lockdown, and agreement should be reached with the institutions of higher education regarding the validity of the modified exams and the implications for acceptance to higher education.
4. A budget reserve should be prepared to cover the implementation of programs such as the “Summer Vacation School” program, summer camps that operate within the social distancing framework, and other activities that will make it easier for parents to continue going to work.
5. The public should be involved in the decision making process and consultations should be held with past educators as to which measures are worth adopting.

The above is of course dependent on organized and sustained efforts to prepare the system for the day-to-day implementation of hybrid teaching and learning and the rapid narrowing of gaps in technological infrastructure on the level of the city, the school, and the individual student.

The coronavirus crisis: An opportunity for long-term change

Alongside the problems that have arisen and will continue to arise due to the coronavirus pandemic, it has also created an opportunity — perhaps a one-time opportunity — to make far-reaching changes in how the education system operates that can bring about a transformation in the system’s functioning. This section will present three changes of this type.¹² Of course, these are proposals and ideas that need broad and in-depth discussion and can serve as a platform for future discussion. They involve some significant obstacles and without a doubt will be opposed by some groups and some educators. They are not the only possible measures that can be adopted and may not even be considered the most important ones; other initiatives and projects may, of course, be no less beneficial. That being said, their implementation, in whole or in part, is worthy of consideration, or, at the very least, it is worth discussing their validity and efficacy in detail.

12 A fourth change relates to reducing the number of students per class, which is discussed in detail in the next chapter in this book.

A. Greater efforts to reduce educational gaps

The coronavirus crisis and the subsequent shift to remote learning has widened academic gaps, while, at the same time, it has increased awareness of the need to reduce them. This awareness is not new and the system has invested effort in this direction for many years. However, the coronavirus crisis has made it clear (to anyone for whom it was not yet clear) that the scope of these efforts is insufficient. Using a differential standard for budgeting as the sole policy tool implemented primarily through additional teaching hours for students from weaker socioeconomic backgrounds — without the possibility of converting it into money — cannot satisfy all the needs. It is necessary to adopt several complementary measures in order to reduce and even eliminate the harm caused to weaker students as a result of the lockdown and the shift toward remote teaching and learning.

First of all, governmental, public, and civil resources need to be mobilized for the purpose of improving and upgrading the technological infrastructure that facilitates remote learning and teaching, and they need to be focused on the most serious gaps among the weak populations. This includes providing a computer for every student, even at the expense of the state, if the student's parents are unable to afford one; providing internet connection with sufficient bandwidth, again at the expense of the state or some other source if the family does not have sufficient means; amplification of the internet strength in areas that require it; and the establishment of regional learning centers near student residential areas for those whose home conditions do not allow for remote learning. Efforts in this direction should be focused first on the older students, until the efficacy of remote learning for younger age groups is examined.

The damage caused by the waves of lockdowns on the one hand and the large scale implementation of remote learning on the other have increased the importance of the schools' support frameworks, both within the school and in the local municipality. The impact of the lockdown on students who are on the brink of dropping out from the system or who have already done so calls for an increase in the number of truancy officers and an expansion of their authority. In view of the difficult economic, family, and social reality created in some homes, it is critical to reinforce and expand the roles of the psychological support services, social workers, and guidance counselors. The fear of recurring health issues points to the need to restore the position of school nurse, an important service that was privatized in the past and essentially ceased to exist.

In addition to all of the above, it is worth considering the establishment of a legal foundation for efforts to increase equality in the education system. This will include differential budgeting, prioritizing compensation for teachers in schools that serve populations with a weak socioeconomic status, reinforcement of the support frameworks serving students from weak populations, and strengthening of the informal education frameworks aimed at these populations.

B. Fundamentally changing the bagrut (matriculation) exams

If there is any point of consensus among educators in Israel, it is the huge damage to the education system caused by the bagrut exams in their current format. Researchers, teachers, and public officials have written numerous articles, op-eds, and recommendations that claim that the bagrut exams lead to shallow learning, reduced autonomy of the teaching staff, superficial learning based on external motivation and learning by rote, and other adverse outcomes. Few educators today believe that the bagrut certificate is an indicator of intellectual, academic, emotional, and social maturity, achieved during 12 years of study, or even that it is an effective indicator of the scope and depth of the knowledge acquired during those years. The only justification for bagrut exams apart from the claim that students will not learn without a concrete target in the form of a bagrut certificate is the need for a tool that institutions of higher learning can use to select among applicants. All of the attempts to bring about a change in the role of the bagrut exams in the educational process in Israel and in their format have totally failed due to the opposition of two bodies with significant political power. The first is the institutions of higher education who are afraid of losing a selection tool that has become so entrenched in the public psyche and that eliminates the need for them to create a selection process. The second is the more amorphous fear that there will be a drop in motivation for students to study particular study majors.

The coronavirus crisis, whose end appears to be nowhere in sight, is creating a new reality in the education systems of Israel and other countries. Countries such as the Netherlands, France, Norway, and the UK have canceled year-end exams and replaced them with internal exams given by the schools in a variety of formats.¹³ The remote learning processes on the one hand and the massive

13 See UNESCO (2020). This report includes references to the official documents of various countries that relate to the need for changes in the national exams given at the end of high school.

penetration of innovative learning technologies on the other are liable to result in a complete undermining of the principles of supply and demand for institutions of higher learning and will require teaching methods that differ from those used in the past. As a result, it is very possible that the bagrut certificate will lose some of its importance and centrality in the new framework of relations between formal education and higher education and that a new way of thinking about the very need for bagrut exams will be adopted.

The Ministry of Education's solution to the situation created by the lockdown and the opening of the school year included the following: a) a reduction in the number of external exams (at the end of the first lockdown, a reduction to six exams, and at the end of the second lockdown, a reduction to five); b) a reduction in the required learned material for these exams; and c) the implementation of internal exams in other compulsory subjects that will be included in the bagrut certificate, and the provision of a weighted school score for those exams. This decision by the Ministry of Education, which was made ad hoc and under strong public pressure, is of critical importance. On the one hand, it strengthens the status of scores provided by the schools to replace the bagrut exams in "less important" subjects and on the other hand reduces the importance of the external bagrut exams. If the marks in "less important" subjects can be relied on, in particular when this involves a three-year average, then perhaps they can also be relied on in the "important" subjects.

The unique situation created by the lockdown in 2020, which is likely to arise again in possible future lockdowns, can be used to make changes in the bagrut exams and to replace them with a high school certificate. This change can contribute to deeper learning in the schools, greater autonomy for the teaching staff, and the modification of teaching methods and learning material to fit the characteristics of students and teachers, the specific conditions of each educational institution, and the needs of the 21st century. This need is amplified by the concern that under the conditions of a prolonged pandemic and without significant modification of the bagrut exams, their value as an indicator of long-term learning performance will diminish and their weight from the perspective of time devoted to them will increase, at the expense of other subjects.¹⁴

14 For a detailed proposal on this issue, see Blass (2014).

C. Creation of a National Education Council

The polarization in Israeli society, the rapid turnover of government ministers, and the gap between the visions of political leadership and the time required to implement those educational policies are all factors that emphasize the importance of establishing a body with professional and ethical authority, whether statutory or voluntary, which will periodically and critically examine the goals, principles, and rules that guide the education system, will monitor the main trends, and will decide on general proposals and policy directions that will promote positive trends and limit negative ones. The coronavirus crisis has revealed the importance of creating such a body and the harm caused by not having one.

This body — to be called the National Education Council, the Education Cabinet, or any other suitable name — must be independent and professional and must have an organizational and financial framework that will facilitate its day-to-day operations throughout the year. Every advisory committee to the Ministry of Education, even if it is composed of top educators, has, by definition only a few members and undefined authority and powers, and, therefore, is not a substitute for such a body. It is worthy for the new body to operate within the Prime Minister's Office, as do the National Security Council and the National Economic Council.

Conclusion

These are only preliminary insights and conclusions with respect to the education system during the first wave of the coronavirus crisis and what is expected of it in coming years. Only time will tell whether the predicted trends will be realized. The fact that they are based on hypotheses and forecasts, some of which will be borne out and others that will not, does not absolve the education system from taking steps to help mitigate the expected difficulties and promote activities with the goal of increasing and achieving positive outcomes. Each of the outcomes that we have described requires close monitoring, and the options we have presented call for in-depth discussions by educators and the public. Hopefully, that will indeed be the result.

References

English

- Akbulut-Yuksel, M. (2009). *Children of war: The long-run effects of large-scale physical destruction and warfare on children*. IZA Discussion Papers No.4407.
- Anderson, B. (2020). [Learning loss and the coronavirus](#). Harvard EdCast.
- Andrabi, T., Daniels, B., & Das, J. (2020). [Human capital accumulation and disasters: Evidence from the Pakistan earthquake of 2005](#). RISE Working Paper 20/039.
- Andrew, A., Cattan, S., Costa Dias, M., Farquharson, C., Kraftman, L., Krutikova, S., ... Sevilla, A. (2020). [Learning during the lockdown: Real-time data on children's experiences during home learning](#). Briefing Note. Institute for Fiscal Studies.
- Azevedo, J. P., Hasan, A., Geven, K., Goldemberg, D., & Iqbal, S. A. (2020). [Learning losses due to COVID-19 could add up to \\$10 trillion](#). Washington DC: Brookings Institution.
- Baker, M. (2013). Industrial actions in schools: Strikes and student achievement. *Canadian Journal of Economics*, 46(3), pp. 1014–1036.
- Belot, M., & Webbink, D. (2010). Do teacher strikes harm educational attainment of students? *Labour*, 24(4), 391–406.
- Blass, N. (2014). [Bagrut exams: Issues and recommendations for reform](#). Policy Paper No. 2014.02. Jerusalem: Taub Center for Social Policy Studies in Israel.
- Das, J., Daniels, B., & Andrabi, J. (2020). [We have to protect the kids](#). RISE Insight Series 2020/016.
- Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2020). [COVID-19 and student learning in the United States: The hurt could last a lifetime](#). McKinsey & Company.
- Goodman, J. (2014). [Flaking out: Student absences and snow days as disruptions of instructional time](#). NBER Working Paper No. 20221
- Grewenig G., Lergetporer, P., Werner, K., Woessmann, L., & Zierow, L. (2020). *COVID-19 and educational inequality: How school closures affect low- and high-achieving students*. CESifo Working Paper Series 8648, CESifo.
- Hanushek, E. A., & Woessmann, L. (2020). *The economic impacts of learning losses*. Paris: OECD Publishing.
- Ichino, A., & Winter-Ebmer, R. (2004). [The long-run educational cost of World War II](#). *Journal of Labor Economics*, 22(1), 57–86.
- Jaume, D., & Willén, A. (2019). The long-run effects of teacher strikes: Evidence from Argentina. *Journal of Labor Economics*, 37(4), pp. 1097–1139.
- Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). [Projecting the potential impacts of COVID-19 school closures on academic achievement](#). Ed Working Paper No. 20–226. Providence, RI: Brown University, Annenberg Institute.

- Kuhfeld, M., & Tarasawa, B. (2020). [*The COVID-19 slide: What summer learning loss can tell us about the potential impact of school closures on student academic achievement April 2020*](#). NEWA Research, Collaborative for Student Growth.
- Labaree, D. (2010). Founding the American school system. In *Someone has to fail: The zero-sum game of public schooling* (pp. 42–79). Cambridge, MA: Harvard University Press.
- Labaree, D. (2020, July 17). [What kids miss when they go without school](#). *New York Daily News*.
- Lee, Y. (April 29, 2020, April 29). [Calls to Israeli domestic violence hotlines soar under coronavirus lockdown](#). *Haaretz*.
- Meng, X., & Gregory, B. G. (2007). [Exploring the impact of interrupted education on earnings: The educational cost of the Chinese Cultural Revolution](#). IZA Discussion Papers No. 2548.
- Miller, C. C. (2020, July 16). [In the same towns, private schools are reopening while public schools are not](#). *The New York Times*.
- National Academies of Sciences, Engineering, and Medicine (2020). *Reopening k–12 schools during the COVID-19 pandemic: Prioritizing health, equity, and communities*. Washington, DC: The National Academies Press.
- Picou, J. S., & Marshall, B. K. (2007). Social impacts of hurricane Katrina on displaced k–12 students and educational institutions in coastal Alabama counties: Some preliminary observations. *Sociological Spectrum*, 27(6), 767–780.
- Psacharopoulos, G., Patrinos, H., Collis, V., & Vegas, E. (2020). *Lost wages: The COVID-19 cost of school closures*. Policy Research Working Paper No. 9246. Washington DC: The World Bank.
- Selbervik, H. (2020). [Impacts of school closures on children in developing countries: Can we learn something from the past?](#) CMI Brief No. 5.
- Taub Center (2020). [Press Release: Survey of teachers in the Israel Teachers Union](#). Jerusalem: Taub Center for Social Policy Studies in Israel.
- UNESCO, 2020. [COVID-19 organizing and conducting exams and assessments during school & university closures — resources & references](#). UNESCO, Education Sector.
- von Hippel, P. T. (2019). [Is summer learning loss real? How I lost faith in one of education research's classic results](#). *Education Next*, 19(4), 9–14.

Hebrew

- Detel, L. (2020, October 11). [Signs of depression in first grade: Learning by Zoom is making children feel helpless](#). *The Marker*.
- Lee, Y. (2020, June 25). [Referrals to the Welfare Departments rose this month by 68% compared to the same time in 2019](#). *Haaretz*.
- Ministry of Finance (2020). [Socioeconomic and sector gaps in preparedness for distance learning in the Ministry of Education](#). Jerusalem: Chief Economist Division, Ministry of Finance.
- Tal-Spiro, O. (2017). [Data on the Ministry of Education nutrition program in schools](#). Jerusalem: Knesset Research and Information Center.