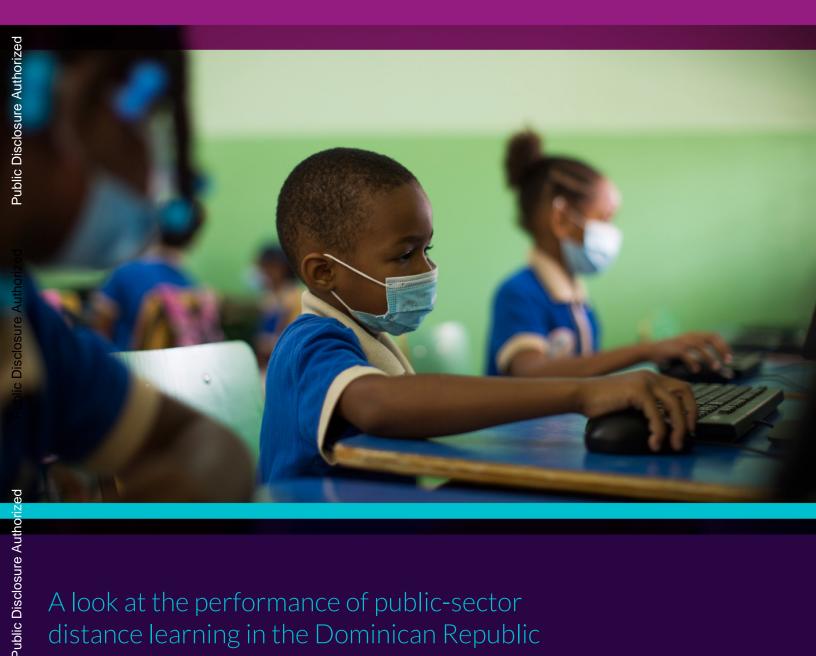
## **EDUCATION FOR ALL BY** SAFEGUARDING HEALTH



A look at the performance of public-sector distance learning in the Dominican Republic in times of COVID-19









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#### **FINAL REPORT**

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July 8th, 2021









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## Introduction



ver since it was first detected in December 2019 in Wuhan, COVID-19 has infected more than 181 million people around the world and caused close to 4 million deaths. This virus has become an economic and social tragedy for humanity. In economic terms, the impact of the pandemic is huge, causing the most profound global recession since the end World War 2 (Levy & Fillipini, 2021). In terms of health, the impact of the coronavirus has also been enormous, not only due to the costs associated with the disease itself, but also to the impact that the lockdowns, the loss of loved ones, anxiety and depression have brought on the general population (WHO, 2021).

Naturally, the global education sector has also suffered enormously. In fact, according to the Global Director for Education at the World Bank, the world is going through the most severe educational crisis in the last 100 years. A study by UNICEF (2021) revealed that during the pandemic, schools around the world remained closed for an average of 95 days, while 168 million children could not attend classes. Latin America and Southeast Asia were the regions where these closures lasted the longest, with 158 and 145 days, respectively.

Recent global estimates suggest that these COVID-19-induced school closures could result —absent effective education policies— in a 7% loss (0.6 years) in years of schooling among those generations that were attending an educational establishment when the pandemic hit. Estimates also suggest that, in terms of educational quality, school closures could lead to a 25% increase in the number of students scoring below the proficiency level in PISA's international standardized tests (Azevedo et al, 2021). In fact, a study done in the Netherlands shows that the eight-week-long school closure that took place in that country led to a fall in standardized test scores among

students of 0.08 standard deviations, equivalent to the loss of one fifth of the school year (Engzell, Frey & Verhagen, 2020). This study is important in the sense that its results can serve as a proxy for those that would be achieved by other education systems "in a best-case scenario," as school closures in that country were of short duration and its pre-pandemic school system was already equitable, well financed and with some of the highest connectivity rates in the world. In monetary terms, estimated by Azevedo et al. (2021) suggest that the educational losses will result in a reduction in the annual earnings of current students of approximately US\$872, or US\$16,000 throughout their working lives.

It is expected that the impact of COVID-19 on the education sector of the Dominican Republic will be similar or even greater that that projected by the World Bank above. Several factors lead us to this forecast. First, the restrictions put forward to safeguard the health of the country's population led to one of the longest school closures in the world, which took place between March 19, 2020 and May 25, 2021. In fact, according to the aforementioned UNICEF study (2021), the country's schools remained closed for a total of 171 days, a number that even exceeds the regional average. Second, the quality of education, measured according to standardized national and international tests, showed that the quality of learning among students prior to the pandemic was low. According to the PISA test scores from 2019, barely 20% and 10% of 15year old students exceeded Level 2 in language and math, respectively. Third, access to distance education tools was poor and inequitable. For instance, according to Fernández & Alcántara (2021), in families from the first quintile, access to the Internet, computers or tablets in 2019 barely reached 11.8%, 4.17% and 2.5%, respectively.

In order to address the challenges imposed by the pandemic and reduce its negative effects, governments around the world put into place a multitude of policies seeking to mitigate the spread of the virus, while providing continuity to the educational processes of children and youngsters via virtual or distance education arrangements.1 The government of the Dominican Republic was obviously not the exception and it designed and implemented the "Education for All by Safeguarding" Health" educational policy. This policy was based on five key strategies that contemplated a mix of educational material and tools in the case of students, and intensive training for teachers and school directors. The first of these strategies included the design, production and delivery of specialized workbooks to enable students of all grades to undertake educational projects according to their abilities. It was planned in such a way that the workbooks would be delivered on a monthly basis at the initial, primary and lower secondary levels, and quarterly for upper secondary level students. From the beginning, these workbooks were conceived so that parents could take an active role in their use, particularly in the case of primary student homework. The second strategy was the production and broadcast of educational programs via TV, YouTube and radio. Three hours of TV courses were produced and transmitted each day and for every grade, broadcast over different nationwide channels, both in the morning and the afternoon, to facilitate student connectivity. The third strategy was the distribution of PCs, laptops and tablets to students and teachers to facilitate their remote work. The fourth strategy was the design and implementation of training programs for school directors and teachers and, lastly, the fifth strategy was strengthening the informationgathering system via the SIGERD, with the goal of understanding and monitoring the performance of distance education.3

Using a quantitative descriptive analysis of supply and demand, this report examines the performance of the "Education for All by Safeguarding Health" education policy in the Dominican Republic's public system. The report complements prior nationwide reports on the subject, such as EDUCA (2021), Fernández & Alcántara (2021), Organization of Ibero-American States - OEI (2021) and the second survey from RED-Actúa (2021). Specifically, and for the purpose of obtaining the demand side view of the performance of distance education, a phone survey was designed and undertaken among 800 heads of households with children attending a public education establishment in the country. Additionally, and in order to obtain the supply side view, a survey of 454 public education establishment directors was designed and carried out, ensuring the sample was representative at the national level. That data is also combined with TV ratings information from the Greater Santo Domingo and Santiago areas, a key MINERD tool during distance education.

The analysis of the information contained in these databases allows us to understand, from the point of view of both parties, the performance of distance education in the Dominican Republic during the COVID-19 pandemic. The main findings show that government efforts guaranteed access to educational resources and material. The vast majority of heads of households and establishment directors reported that their children and students were able to access the workbooks and educational programs broadcast on TV and YouTube. Moreover, close to 10% of the parents reported that their children had listened to educational programs over the radio. Efforts in terms of distributing tech tools such as PCs, tablets or laptops are also apparent. Practically all public sector teachers in the country and close to 40% of secondary students received these tools, thus facilitating their work during the

<sup>1</sup> For interested readers, the ECLAC report (2020) summarizes the measures adopted by 33 countries in Latin America and the Caribbean.

<sup>2</sup> For interested readers, a document summarizing the government strategy is referenced in the literature under MINERD (2020).

According to estimates from IDEC (2021), the cost of each of the first four strategies was approximately \$330 million for the workbooks (it con include additional costs), \$5.226 billion for TV programs (assigned exclusively for broadcast rights, to which production costs must be added, although there is no information available on these), \$23.063 billion for PCs, tablets and laptops (not including platform costs, digital content or software) and \$4.343 billion for teacher training.

period of distance education in the country. The analysis also makes it clear that most teachers and directors received specific job training during the 2020-2021 school year, and that the vast majority—despite the risks entailed by the pandemic—worked in-person at least 2 or 3 times a week at the educational establishment. Finally, the head of household survey reveals that approximately 70% of them value the effort undertaken by teachers during distance education, while close to 55% believe that the education received during the school year was good.

Despite these achievements and positive valuations, the study stresses—as was also the case in developed countries—that the learning process could be seriously impacted during distance education, as it was not conveyed in the best conditions. First of all, we found that the average number of hours of study reported by parents were low. 60% of parents reported that their children were studying less than three hours a day. It is worrisome that close to 9% of parents declared that their children either do not study or do so for less than one hour a day. In the near future, this could result in high abandonment rates, trends that other nationwide studies such as Fernández & Alcántara's (2021) are already showing even for 2020. Moreover, the data indicates that only slightly more than half of all students managed to communicate daily with their teacher to obtain support and guidance for their school chores, and that this communication was mostly via WhatsApp. It is thus not surprising that, according to most parents and establishment directors, the learning achieved via distance education was less or much less than that achieved by students when they were attending an educational establishment in person.

The rest of the report is divided into five additional sections detailing the aforementioned results. The second section defines the data used throughout the report and its major characteristics. The third section assesses the educational resources delivered to students, teachers and directors, while the fourth section looks at the communication and support between different system stakeholders during distance education. The fifth section summarizes the opinion of parents and school directors with regards to the performance of distance education. Finally, the sixth section summarizes the main conclusions and provides some thoughts on the types of policies that will have to be designed and implemented at short notice to amplify the efforts made so far and reduce the negative impacts that the pandemic has unleashed on the country and the wider world in terms of education.

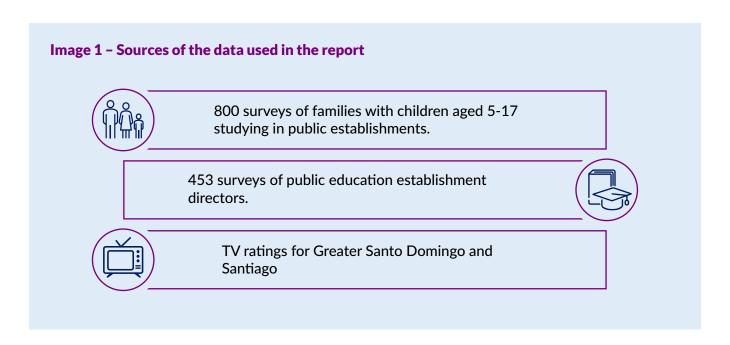


## Data



he information used in this report comes from three distinct sources outlined in Image 1. The first two are surveys that were specifically designed and carried out to provide an insight—from a public education supply and demand point of view—on the performance of key aspects of distance education, according to the heads of households

and establishment directors. This information is complemented with TV ratings data from the Nielsen company, which allowed us to gain relevant information on one of the pillars of the educational strategy during the pandemic. Below, we outline the main methodological features of each one of these sources.



#### 2.1 Family surveys

The research team designed a unique questionnaire for this report which included 51 questions related to the education of children aged between 5 and 17 years old who attended a public school in the Dominican Republic during the 2020-2021 school year. Those questions dwelled on aspects such as the use of the educational tools made available by MINERD to guarantee distancing; the communication between different system stakeholders (students, parents, teachers and education establishment); as well as the time devoted to study by their children and their opinion of the type of learning and support received during this period.

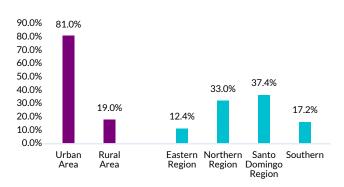
Implementation was performed by the NewLink polling firm, which, between March 25 and April

23, 2021, conducted phone surveys to a total of 800 families in the country. Each of these families was asked about the educational experience of one of their children, changing randomly between the first and last born child to guarantee the representativeness of all age cohorts within the established framework.

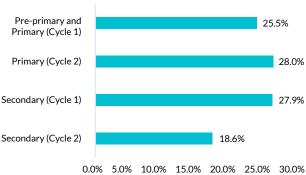
By using the sampling weights handed over by the company, a picture emerges where students from urban areas are weighed 81% and those from rural areas 19%. The representativeness of each region is shown in panel A of Image 2. The survey gathers information from children and youngsters in each of the four education levels in the Dominican Republic. The percentages of each are shown in panel B of Image 2. Interested readers can find the technical details of the survey in the Annex.

#### Image 2 - Basic characteristics of the household survey sample

Panel A - Representation of the household sample according to area and region



Panel B – Educational level that children are attending



Source: Heads of Household Survey (IDEC-IDEICE, 2021). Authors' own calculations, including sample weights.

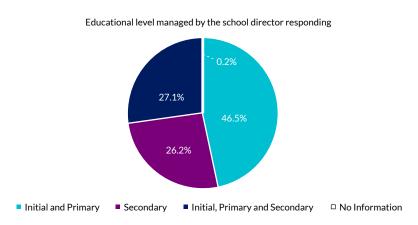
#### 2.2 School director survey

As in the case with families, the survey of public education establishment directors was designed by the research team for this specific project. The responses were gathered via a combination of email (48%) and phone (52%) surveys to a random and representative nationwide sample between March 25 and May 22. The entire sample included 454 public education establishment directors.

As can be observed in Image 3, according to the responses delivered by them, 47% headed an initial and primary education establishment, 26% headed a secondary establishment, while the remaining 27% headed all three educational levels (0.2% did not respond this question).

While comparing the characteristics of the educational establishments with other public facilities across the country, we could not find statistically significant differences in the great majority of variables, thus guaranteeing its representativeness. For instance, the share of survevedestablishments of fering primary, initial and full-day education is the same as the national total. More importantly, the educational quality offered by the establishments surveyed measured by the results obtained by students in third, sixth and ninth grade diagnostic tests is exactly the same as the national total, thus corroborating the national representativeness of the information gathered. Interested readers can find the technical details of the survey in the Annex.

Image 3 - Educational level managed by the directors in the survey



 $Source: School\ Director\ Survey\ (IDEC\text{-}IDEICE, 2021).\ Authors'\ own\ calculations.$ 

#### 2.3 TV ratings data from Nielsen

As a third source, we used information from national TV ratings for Greater Santo Domingo and Santiago, collected on a permanent basis by Nielsen, the company in charge of gathering TV ratings nationwide. Their information is representative of a universe of 912,325 children and youth aged between 4 and 17, while the randomized sample includes a total of 232 households with minors in that age bracket. The information available includes ratings for the

following TV channels: Teleantillas, Telemicro, Antena 7, Color Visión, Telesistema, Telecentro, Digital 15, Teleuniverso, CDN 37, Canal 25, disaggregated by time slots 9:00 am-12:00 pm and 3:00 pm-6:00 pm.4 In this report we used two ratings indicators commonly known as REACH and Average Time Spent (ATS). The REACH indicator shows the total number of people that are connected to each channel on any given month during the aforementioned time slots. Moreover, ATS indicates the time spent with the TV on and tuned to each channel during those time slots by individuals of a certain age range.

<sup>4</sup> The government contracted out the transmission of channels that are not included in Nielsen's ratings, namely: Cinevisión, Telemedios, Supercanal, Televida, CERTV, Digital Visión, Arcoíris.



# MINERD educational resources during distance education



he challenge of ensuring the availability of distance education for every child and youngster, faced by governments around the world during the COVID-19 pandemic, was enormous. In the Dominican Republic, MINERD tackled it by designing and implementing the "Education for All by Safeguarding Health" strategy, described briefly in the introduction. This chapter presents the information on access and use among students, teachers and school directors of the main resources that constituted the policy during the 2020-2021 school year.

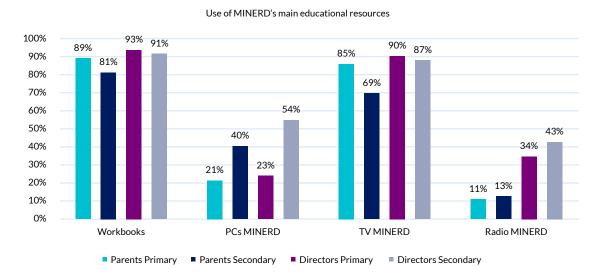
## 3.1 Access and use of educational resources among students

Image 4 presents a breakdown of the access and use of the main educational resources provided by MINERD to students enrolled in the country's public education establishments, according to the parents and the directors of the facilities surveyed. It is clear that the efforts undertaken by the Ministry to ensure that students had access to the tools needed to facilitate distance education were effective. Both parents and school directors responded that close to 90% of primary and secondary level students had access to MINERD's workbooks and TV programs. The image also shows student access to PCs, tablets or laptops, and how close to 40% of secondary and 21% of primary students received one of these devices during the academic year. Regarding access to educational programs over the radio, the percentage of parents responding that their children knew about and used them was on average just 12%, likely due to not being able to access a TV or other communication tools.<sup>5</sup>

Naturally, even though accessing these resources is key to ensuring student learning, we need to understand the way these resources were used by them. An initial overview of the answer to this question is presented in Image 5. Panel A shows that, according to parent responses, the use of these resources is intensive. In most cases, students use them every day or at least 2 or 3 times a week. It is interesting to note that while primary students use MINERD's workbooks and TV programs with greater frequency, secondary students use PCs, laptops and tablets more often than other resources. Panel B also shows that parent involvement in the education of their children during distance education is significant. As was to be expected, this involvement diminishes as the grade level increases, independently of the educational resources being analyzed. According to parent responses, 83%, 73% and 65% of primary students required help in all or nearly all cases when working with workbooks, radio or TV. 43% of lower secondary students that listened to educational programs over the radio needed help from their parents in all or nearly all cases, while an average of 27% of them required their help to use the workbooks, their PCs or to watch TV programs. Older students required the most help from their parents when using a PC.

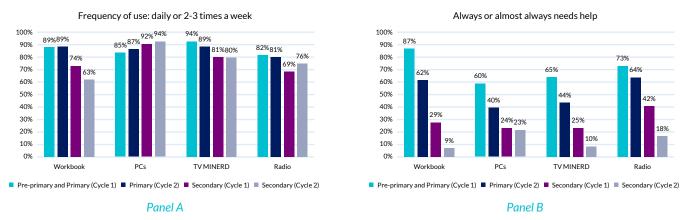
<sup>5</sup> It is important to clarify that the larger percentage of access to PCs and radio informed by school directors, compared to parents, can be explained by the fact that the question posed to them asked if any student in their establishment had had access.

Image 4 - Access to and use of MINERD's main educational resources on the part of students (according to the responses of parents and schools directors)



Source: Heads of Household and School Director Surveys (IDEC-IDEICE, 2021). Authors' own calculations, including sample weights.

Image 5 - Frequency and need for help while using MINERD's main educational resources on the part of students (according to parent responses)



Source: Heads of Household Survey (IDEC-IDEICE, 2021). Authors' own calculations, including sample weights.

Image 6 also shows that most parents are satisfied with these resources; satisfaction levels exceed 80% in the case of workbooks, PCs and educational TV programs. The level of

satisfaction is lower for radio programs; in that case 41% of the parents with children who used it reported being somewhat or not at all satisfied with the resource.

Image 6 - Satisfaction level of parents regarding the educational resources provided by MINERD

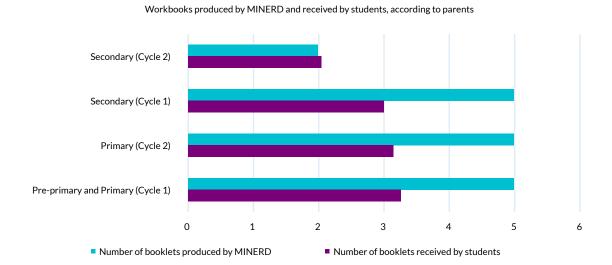


 $Source: Heads \ of \ Household \ Survey \ (IDEC-IDEICE, 2021). \ Authors' own \ calculations, including \ sample \ weights.$ 

Although the information gathered via surveys prevents us from understanding the extent to which students took ownership of these resources during distance education, part of that information enables us to understand certain aspects that need to be considered in future research and, even more importantly, for future education policies to benefit from that material. In the case of workbooks, for instance, both parents as well as school directors reported that students at all educational levels received less resources than those produced by the Ministry for them.

For example, Image 7 shows that at the time of the survey—according to parent responses—primary and secondary students had received a total of three workbooks on average. According to the date the survey was conducted, students should have received two workbooks more than informed. Only in the case of parents with children attending the upper secondary level is the average number of workbooks received equal to the number of workbooks printed by MINERD for that education level.

Image 7 - Number of workbooks received by students according to heads of households



Source: Heads of Household Survey (IDEC-IDEICE, 2021). Authors' own calculations, including sample weights.

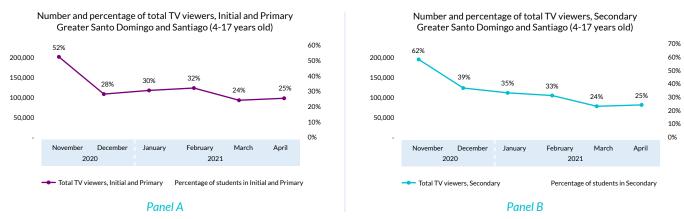
Ratings information from Nielsen complements the view of parents and school directors regarding the use of the educational TV programs broadcast between November 2020 and April 2021. More specifically, Image 8 presents the total TV audience that watched the predetermined channels and time slots that transmitted MINERD's educational programs, according to the education level of the viewer.6 As can be observed, in November 2020 a total of nearly 200,000 children and youngsters in Greater Santo Domingo and Santiago watched one of the primary and secondary channels at the established timetable. Given that in these areas there were close to 390,000 primary and 315,000 secondary students enrolled in the p ublic sector, the ratings information suggests that close to 52% of potential primary students and 62% of potential secondary students, at most, watched one of the channels broadcasting the educational programs.<sup>7</sup> Although it should be a cause for concern that, according to the same information, the total number of students watching these channels dropped significantly over time, barely reaching 25% by April 2021.

Nielsen's information allows us to go even further in terms of the use of this resource by estimating the average time that each of these viewers spent watching these channels during the predetermined time slots. Image 9 shows that, even at the start of the school year, when close to 50% of potential students were tuning in, children and youngsters were only watching for close to 36 minutes, equal to 20% of the mandatory three hours stipulated by MINERD. Moreover, and as can be observed, the percentage of time that TV viewers spend watching these programs has fallen over time, reaching only 10% by April 2021.

<sup>6</sup> Each channel and time slot had a set educational program to be transmitted for each grade. This allows us to aggregate the information according to the education level that each viewer is watching.

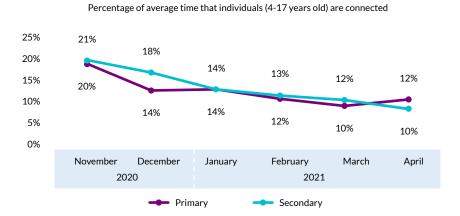
<sup>7</sup> The families and households where Nielsen has its measuring equipment can also include children attending private schools; therefore, the estimated percentage is only an approximation and is the maximum possible audience of students in public establishments that could have watched the programs in those areas.

Image 8 - Number and total percentage of TV viewers in Greater Santo Domingo and Santiago (4-17 years old)



Source: Nielsen. Authors' own calculations.

Image 9 – Time spent by students watching the predetermined channels and time slots, by percentage of stipulated time (4-17 years old)



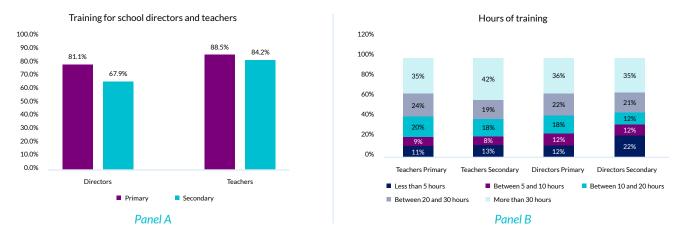
Source: Nielsen, Authors' own calculations.

## 3.2 Training and resources for school directors and teachers

In order to ensure distance education, MINERD also made significant supply-side efforts by delivering equipment and providing training to educational staff throughout the nation. Image 10 illustrates the effort made by the government to ensure that school directors and teaching staff received training during the 2020-2021 academic year. As can be observed in panel A, 81% and

68% of primary and secondary school directors, respectively, received some kind of training. These percentages increase to 89% and 84% respectively in the case of teachers at these levels. Panel B, on the other hand, shows the average duration of that training. It highlights the fact that more than 60% of school directors and teachers received more than 20 hours of training, with only 11% receiving less than 5 hours of training. The only exception appears with secondary school directors, who—according to their responses—were the least likely to receive training, and when they did, it was shorter than the others.

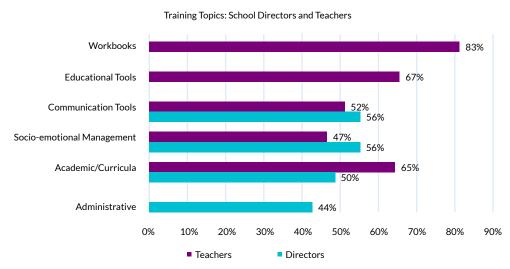
Image 10 - Percentage of educational staff receiving training and average hours of training received



Source: Survey of educational establishment directors (IDEC-IDEICE, 2021). Authors' own calculations.

Image 11 shows the most common topics reported by the directors that attended the respective trainings. As can be observed, according to the directors communication tools and socioemotional management were the topics they received the most training on, followed by curricular issues and aspects of administrative management. For their part, teachers were mostly trained to use the workbooks, as well as issues with educational tools and curricular aspects.

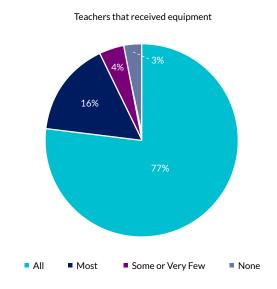
Image 11 - Topics addressed by school director and teacher trainings



Source: Survey of educational establishment directors (IDEC-IDEICE, 2021). Authors' own calculations.

Lastly, Image 13 reveals the enormous effort that the government made to ensure that teachers had access to the equipment needed to provide continuity to their work during distance education. As can be observed, 77% of school directors mentioned that all their teachers had received the equipment, 16% mentioned that most of them had received it, while only 4% and 3% reported that some or none had received it.

**Image 12 - Teachers receiving PCs, tablets and laptops** 



Source: Survey of educational establishment directors (IDEC-IDEICE, 2021). Authors' own calculations.



# Support and communication between various system stakeholders

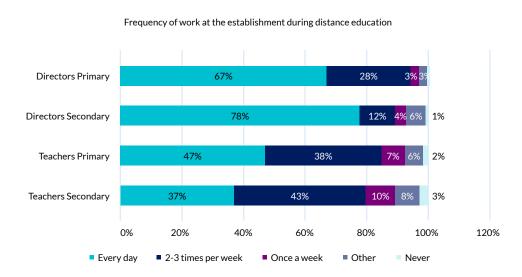


n-personeducationguarantees the existence of continuous communication between the different stakeholders of the educational system. Naturally, distance education presents immense challenges to anyone seeking to open new channels and for students, parents, teachers and directors to remain connected and coordinated across different activities. The first thing worth mentioning is that, despite the risks and difficulties imposed by the pandemic, the great majority of school directors and teachers continued to attend the educational establishments in-person. 90% of school directors attended the educational establishment every day or 2 or 3 times a week during distance education. The percentage among primary and secondary teachers was 85% and 80%, respectively.

Even though communication between different system stakeholders is important, teacher/student communication is paramount. Image 14 shows both how frequently students received feedback for their work, as well as the method of communication most commonly used for that

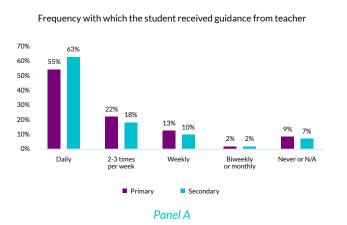
purpose. According to what parents reported, only 55% and 63% of primary and secondary students, respectively, were able to communicate daily with their teachers during distance education for guidance during their educational process. Close to 35% of primary and 28% of secondary students managed to communicate 2-3 times a week, or even once a week. A further source of concern is that close to 10% of parents reported that the communication between their children and teachers—with the goal of obtaining academic guidance—either took place once or twice a month, or did not take place at all during distance education. For its part, panel B shows that the vast majority of parents reported that WhatsApp is the most common method of communication with teachers. Although useful, this tool is clearly not ideal for a discussion geared toward explaining concepts and clarifying doubts. Because of this, the use of platforms like Zoom or Meets is more appropriate. According to parents, 63% of secondary level students communicated with their teachers through this tool, while the corresponding percentage among primary students drops to 35%.

Image 13 - Frequency with which school directors and teachers worked at the educational establishment during distance education



Source: Survey of educational establishment directors (IDEC-IDEICE, 2021). Authors' own calculations.

Image 14 - Frequency and method of communication between teachers and students (as reported by parents)



Source: Heads of Household Survey (IDEC-IDEICE, 2021). Authors' own calculations.

Method of communication with teacher

WhatsApp
Virtual meetings (Zoom, Meet)

Face-to-face meetings

MSM

4%

13%

Phone

11%

14%

5%

Other

0%

20%

40%

60%

80%

100%

Primary

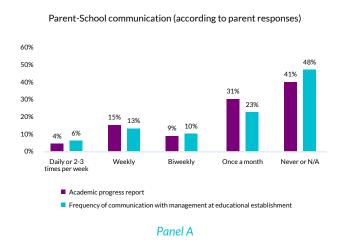
Secondary

Panel B

Both the heads of household and the school director surveys included questions about the communication between both stakeholders. In the case of heads of households, they were asked whether they had received some type of academic report on their children's progress during distance education and whether they had received some sort of direct communication from the educational establishment. Responses are summarizes in panel A of Image 15. It is worrisome that close to 41% of the parents informed not having received any academic progress report on their children, and that 48% informed that they never had any sort of communication with the management of the educational establishment. Panel B shows that in the case of those parents that

did receive communications, the most commonly addressed topic between families and the establishment, according to what school directors informed, was their children's academic progress. It is worth highlighting the huge differences in the topics discussed according to the education level of the establishment. For example, secondary school directors informed that the second most common topic addressed with parents was school abandonment, followed by mental health issues and tech tools. Conversely, according to primary school directors the second most common topic addressed with parents was the return to inperson classes, followed by academic tools and the mental health of the students.

Image 15 - Communication between parents and educational establishment



Return to in-person classes

School abandonment

43.9%

Mental health of students

Academic progress

Tech tools

18.6%

39.5%

Academic tools

36.5%
38.6%

0.0%

20.0%

40.0%

60.0%

80.0%

100.0%

Topics that are commonly discussed with parents (according to school director)

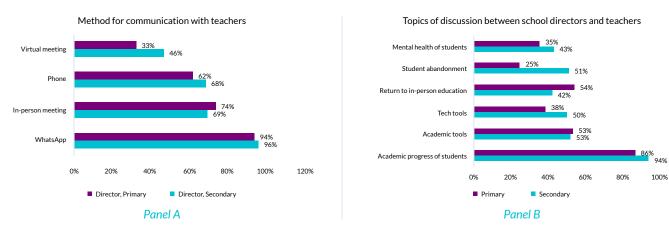
Panel B

Secondar

Primary

 $Source: Heads \ of \ Household \ and \ School \ Director \ Surveys \ (IDEC-IDEICE, 2021). \ Authors' \ own \ calculations.$ 

Image 16 - Communication between school directors and teachers



Source: Survey of educational establishment directors (IDEC-IDEICE, 2021). Authors' own calculations.

The school director survey also asked about the communication between them and their teaching staff. As can be observed in Image 16, and consistent with the response to the days that both stakeholders attended the establishment in-person, approximately 70% of the school directors responded that one of the most common communication methods was in-person meetings. WhatsApp is obviously the most common communication method between them, while virtual meetings was the least common.



## Evaluation of distance education by parents and school directors



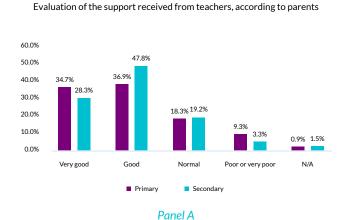
n order to get an initial overview of the performance of distance education, according to each system stakeholder, surveys included both objective as well as perceptive questions on the issue. For instance, Image 17 details the evaluation that heads of household made with regards to teacher support and an appraisal of distance education in general. It is evident that the evaluation that parents made of teacher performance during distance education is high, and is higher among parents of secondary students than those of primary students. Specifically, while 76% of the parents of secondary students considered that the support received by them was good or very good, the percentage among parents of primary students is 71% (panel A).

The opinion of distance education from parents in general, exhibited in panel B of Image 17, is somewhat lower. 69% of parents of secondary students considered that the distance education received during 2020-2021 was either good or very good, compared to only 52% among parents of primary students. Conversely, while 30% of parents of secondary students considered that the education received was average, poor or very

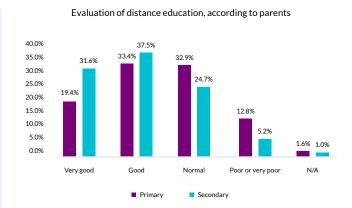
poor, that number rises to 46% among parents of primary students. These responses are consistent with what is illustrated in Image 15 and Image 16, which show that the stakeholders at the primary school level are more likely to discuss the need to return to in-person education.

Image 18, for its part, shows how many hours of study children had during distance education. This is a more objective indicator that highly correlates with the learning that students should be able to acquire during the school year. Evidently, the average hours of study during distance education have been low for all students. Barely 32% of secondary and 14% of primary students studied more than 4 hours a day. In fact, parents informed that 47% of secondary students and 66% of primary ones studied less than 3 hours a day on average. This information, which in turn is consistent with the information provided by Nielsen with regards to the average time that people watched educational programs each day (Image 9), is a source of concern as studies have revealed that the time spent studying determines the final level of learning achieved by students. With such a low number of average hours of study time, it is likely that learning has also been low.

Image 17 - Evaluation of the support received by parents and appraisal of distance education according to parents

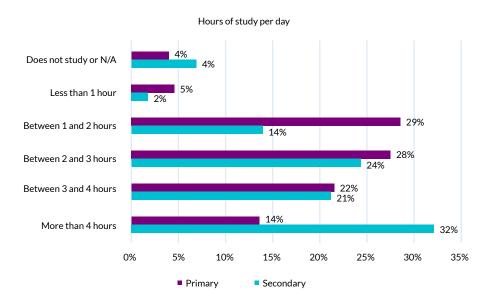


Source: Heads of Household Survey (IDEC-IDEICE, 2021). Authors' own calculations.



Panel B

Image 18 - Hours of study time by students, according to parents

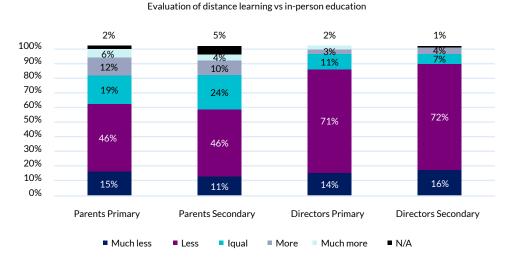


Source: Heads of Household Survey (IDEC-IDEICE, 2021). Authors' own calculations.

It is also worrisome that, according to parent responses, close to 9% of students in the country studied for less than one hour a day or even nothing at all, despite being enrolled in school. This could have implications for the abandonment rates that we will be seeing next year. In fact, recent studies made for the Dominican Republic, such as Fernández & Alcántara's (2021), estimate that the net enrollment rete in initial education will drop from 57.5% in 2019 to 28.5% in 2020.

Given these study time numbers, it should not be surprising that, according the opinion of parents and school directors, learning levels among students during distance education were lower than those achieved in-person. This view is clear when analyzing the results presented in Image 19. 60% of parents of primary and secondary students consider that their children learned much less during distance education than when education was in-person. This percentage rises to 84% among primary school directors and 88% among secondary school directors. Although this is obviously their perception of the situation and in-country studies are needed to measure student learning in an objective manner, international studies based on standardized tests in countries such as the Netherlands (Engzell et al, 2020) have revealed the huge negative impact that school closures have had on student learning.

Image 19 - Evaluation of the learning achieved during distance education vs. in-person education

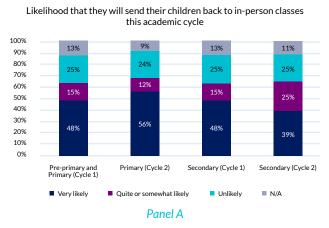


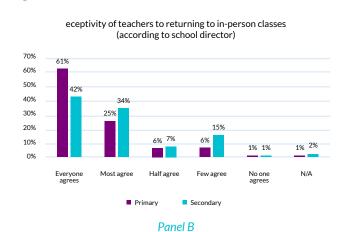
Source: Heads of Household and School Director Surveys (IDEC-IDEICE, 2021). Authors' own calculations.

Undoubtedly, the return of students to inperson classes at educational establishments, maintaining the needed biosanitary protection measures and guaranteeing the vaccination of the greatest possible number of individuals, will benefit both students and their parents in every respect. In this sense, panel A in Image 20 shows the likelihood that parents will send their children back to in-person classes this academic year. Consistent with the evidence presented above, a greater share of parents of primary

students consider it very likely that they will send their children back to school than parents of secondary children (52% vs. 43%). On average, 25% of parents in general consider it unlikely that they will send them back to classes this academic year, while close to 10% does not know or did not respond the question. This can be indicative of fear or a lack of information on the part of a significant part of the population with regards to COVID-19 and the contagion rates in schools when all protection measures are in place.

Image 20 - Likelihood of sending students back to the school establishment and receptiveness of teachers to the return to in-person classes (according to parents and school directors)



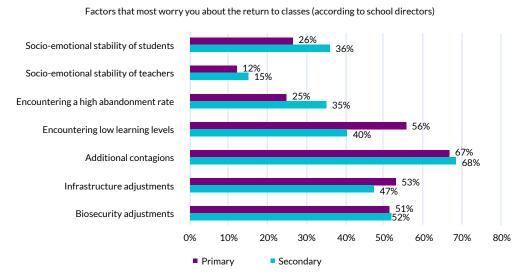


 $Source: Heads of Household and School Director Surveys (IDEC-IDEICE, 2021). \ Authors' own calculations.$ 

Panel B in Image 20 for its part shows that, according to the response given by school directors, the vast majority of the country's teaching staff agrees with the need to return to in-person classes. Again, we see a consistency between the positive receptiveness rates

among primary teachers and secondary ones. Undoubtedly, the return to in-person education is more important for the youngest students, according to what was informed by both types of educational system stakeholders.

Image 21 - Factors of concern around the return to in-person classes, according to school directors



Source: Survey of educational establishment directors (IDEC-IDEICE, 2021). Authors' own calculations.

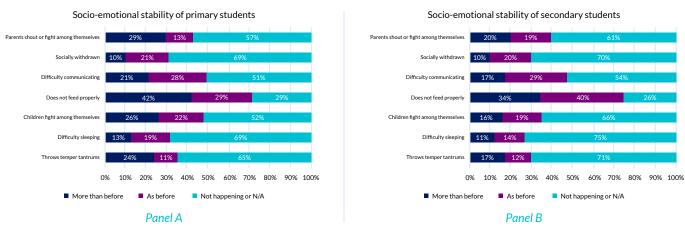
School establishment directors were asked about the three factors that concerned them the most regarding the return to in-person classes. Image 21 reveals that their biggest concern is the possibility of additional contagions; 67% of primary and 68% of secondary school directors mentioned this as a factor of concern. According to primary school directors, the second-most commonly reported factor of concern is encountering low levels of learning among students, a factor reported by 56% of directors at this level, compared to 40%

among secondary school directors reporting it as a factor of concern. It is worth noting the difference in concern among school directors in terms of encountering high abandonment rates; while only 25% of primary school directors are worried about this factor, close to 35% of secondary school directors deemed this a factor of concern. There are also differences in terms of the emotional instability of students, where secondary school directors are more worried than primary ones.

In relation to this last point, Image 22 shows some indicators on the mental, emotional and nutritional health of students as reported by their parents. As can be observed, 20% of parents of primary students and 15% of secondary parents inform that, on average, their children have greater difficulty in communicating, fight among themselves, have difficulty sleeping and have more temper tantrums than before the

pandemic. Only 10% of parents report that their children are more socially withdrawn, possibly because they do not interact with other children during the lockdown restrictions. It is noteworthy that 42% of parents of primary students and 35% of secondary ones report that food insecurity increased for their children and that the likelihood of parents fighting also increased in 24% of all cases, on average.

Image 22 - Socio-emotional stability of students, according to parents



Source: Survey of educational establishment directors (IDEC-IDEICE, 2021). Authors' own calculations.



## Conclusions and reflections



he COVID-19 pandemic and restrictions to mobility that came with it entailed significant efforts by the government and families to ensure the continuity of education. The "Education for All by Safeguarding Health" policy sought, via a comprehensive strategy, to guarantee that despite the restrictions imposed by the lockdown, the country's students would not see their learning process interrupted. The achievements made were important and deserve to be recognized. Furthermore, significant challenges were present and they must be highlighted, as they represent an occasion for reflection whereby this crisis can be used to improve the delivery of educational services in the medium and long term.

Firstly, results show that the vast majority of students enrolled in public education establishments had access to the workbooks prepared by MINERD. This educational resource reached 84% of all students, allowing them-via education projects—to work on issues related to the curriculum and adapted to the grade they were enrolled in. Equally, TV broadcasts of educational programs reached close to 77% of students, according to parent reports. For its part, radio programs reached the close to 11% of children and youngsters from families that surely faced some restrictions in accessing TV programs and whose only means of communication available was this. Lastly, efforts to distribute PCs, tablets and laptops among students allowed 21% and 40% of parents of primary and secondary students, respectively, to inform that their children had received these tools during the pandemic. It is also worth stressing that most parents informed that the use of these tools is frequent and that during distance education their involvement in the education of their children, particularly those in primary, was practically permanent.

Both school directors and teachers benefitted significantly from the educational policy during that phase. According to 77% and 16% of school directors, all or practically all of their teaching staff, respectively, were issued tech equipment allowing them to continue teaching remotely. Moreover, both stakeholders received training on pedagogical subjects, communication

and administrative tools, and even the socioemotional management of students. 81% of primary school directors and 68% of secondary ones informed having received it. In the case of teachers, these percentages rise to 89% and 84%, respectively. This training also lasted more than 20 hours for close to 60% of school teachers and directors. They also demonstrated a commitment to education, as most went to work on-site at their educational establishment on a daily or 2-3 times a week basis.

Despite all these valuable efforts and achievements made, data suggests that the performance of distance education faced many challenges. According to what parents informed, on average the number of hours of study per day was very low. Most parents reported that their children were studying less than 3 hours a day, numbers similar to those found in other national studies (EDUCA, 2021; Red ACTUA, 2021). This is an important finding given that, as proven by international literature on education, a low number of study hours has negative implication on the final learning results achieved by students. Furthermore, it is worrisome that close to 9% of parents declared that their children either did not study, or if they did, they did so for less than one hour a day. Beyond its consequences on educational quality, the very low number of study hours per day will surely have an impact on abandonment rates next school year. In fact, different national-level research suggests a worrying trend for net enrollment rates in midlevel education, even in 2020 (Fernández & Alcántara, 2021).

In line with international evidence and with the opinion of parents in the DR as informed by previous studies, it is not surprising that both parents and school directors maintain that, compared to in-person education, student learning results during distance education were poor. 60% of parents of primary and secondary students feel that their children learned less or much less than when they were attending school prior to the pandemic. This perception of lower learning results during distance education is much greater among school directors, 87% of whom believe that learning results during the

pandemic were lower or much lower than before. The information gathered and analyzed in this document allows us to understand some of the barriers faced by system stakeholders and which explain this perception of poor learning. One of them is access to and use of educational resources. For example, even though most parents reported that their children were able to access workbooks, when we asked how many workbooks they had received during distance education, parents on average responded that they had received a total of 3 workbooks. However, and given the dates of the survey, by that time the government had already designed, printed and delivered 5 workbooks. Moreover, we need to understand the way these workbooks were used at home. This resource and distance education allowed heads of households to strengthen their involvement in the education of their children. Although this is something positive, it is clear that parents lack the required disciplinary and pedagogical knowledge, and thus cannot substitute the support and guidance of their teachers. According to parent responses, only 57% of students communicated daily with their teacher, this communication was done mostly via WhatsApp—especially among primary students—and close to 48% of all parents declared that they had not communicated with the establishment and had not received an academic progress report.

Something similar occurs with the educational programs broadcast on TV. Although the vast majority of parents informed that their children knew of and used them, granular data from Nielsen ratings point to more worrying trends. Data suggests that the audience for educational programs in Greater Santo Domingo and Santiago has been falling constantly over time, and by April 2021 was barely 25% of potential students. Additionally, the average time that students spent in front of the TV has also fallen, by April 2021 it was only 11% of the time originally planned by MINERD to cover the entire curriculum.

With regards to PCs, laptops or tablets, it is worth noting that, despite the aforementioned achievements, most students still have no access to these devices. Finally, there is no evidence of a system-wide strategy to guide the design

and implementation of technologies within the educational sector as a way to accelerate learning and close the educational gaps.

All of these findings lead to some considerations that could aid in the formulation of educational policies in the DR's near future, policies that help to overcome the educational deficits brought on by the pandemic around the world and enhance the efforts of the government and heads of households during the crisis. First of all, it is necessary to ensure that recent efforts to increase the educational coverage were not in vain. There is a latent risk of high abandonment rates, particularly among mid-level education students. This entails the need to develop a system that is able to effectively measure students that drop out and those that are at high risk of abandoning, as well as the implementation of a return-to-school program that ensures that those that dropped out return to the classroom.

As mentioned earlier, the reduced hours of study time and the assessment of learning quality by both parents and school directors suggest that students will arrive with significant educational shortfalls next school year. Nevertheless, and even though this is what the data in the present report indicates, an objective evaluation of the real learning achieved by students is peremptory. We really need to understand what and how much did students learn during distance education to correct course and design and implement remedial education programs to swiftly and effectively fill in any learning gap that may have arisen following the pandemic. This learning evaluation will allow us in turn to analyze the cost effectiveness of the tools designed and delivered during distance education, whose total cost came in at close to 33 billion pesos. Reports such as this will allow us to get an accurate picture on how to leverage the investment in tools such as workbooks and TV and radio programs, and how they can continue to be useful even after students return to school.

Likewise, in order to enhance the efforts made in delivering communication technologies, it is important that we clearly define an educational policy of digital fairness. That is, we need to define an articulated strategy that includes a systemic management of teacher training that ensures that they and their students take ownership of these tools. Naturally, this calls for the development of digital content linked to the curriculum prioritized by the country and the adoption of educational platforms that ensure their distribution and adequate use. Ultimately, all of this must go hand in hand with a guarantee of connectivity and electricity for all students in the country.

Last but not least, it is worth mentioning that, even though this report responds some important and relevant questions regarding the performance of distance education, it also leads the way for future analyses that can complement it. For example, it would be desirable to have some qualitative studies from pedagogical experts that evaluate the curricular and pedagogical aspects of the material prepared and delivered during distance education. Likewise, it would also be desirable to listen to the opinion of other system stakeholders. like teachers and students themselves, on this disruptive year we went through. Nonetheless, the information present in this report allows us to evaluate the achievements made during the last year and provides a guide to start working on the strategies that will allow us to overcome the barriers being faced, thus guaranteeing the quality afforded by the public education system in the country.



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## Technical Annex

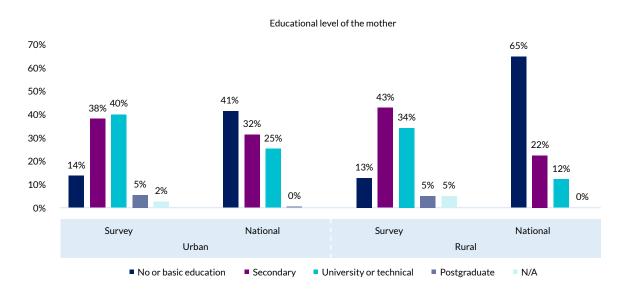


#### **Household Survey**

he implementation of the household survey was performed by the NewLink polling firm, which, between March 25 and April 23, 2021, made phone surveys to a total of 800 families in the country. The polling firm was in charge of sample design and selecting the families included in the survey. According to the technical note, nationwide residential phone listings were used which included markers for provinces and municipalities, facilitating the collection of the samples allocated to each area. Secondly, the firm used cell-phone listings segmented according to province.

The selection of the sample unit was aleatory, using filter questions to determine the demographic profile of the respondent and ensuring that the household included school-age children attending a public establishment. Based on the database available to the firm, the sample guarantees a margin of error of 3.46% and a confidence level of 95%.

According to the socio-demographic data gathered by the sample, the surveyed households are relatively more educated than the national average. As can be seen in the image below, these children belong to households whose mothers were relatively more educated that the nationwide average and are therefore households in a better socio-economic shape than the average population.

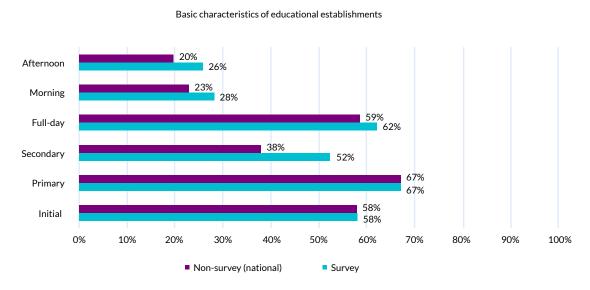


Source: Heads of Household Survey (IDEC-IDEICE, 2021). For national level data, the source of information is the National Labor Force Survey (ENFT, in Spanish), BCRD.

#### Survey of public establishment directors

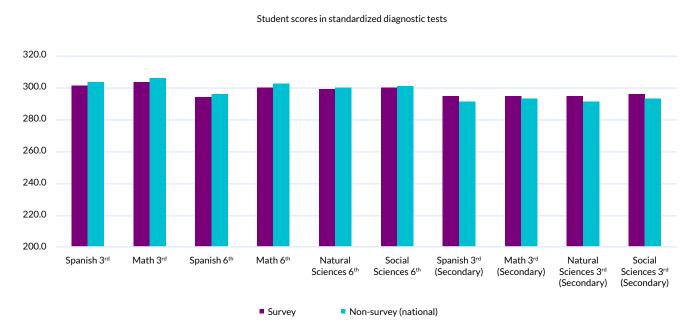
The design and implementation of the public establishment directors survey was performed by the research team with the collaboration of IDEICE's call-center. The sample started with a listing of all public education establishments in the country based on SIGERD 2019. Out of 7,425 establishments, a random sample of 3,000 was initially chosen. Those establishments on which information about the director's email existed were sent the survey electronically, receiving a total a 219 responses. In order to complete a sample that was representative at the national level with a margin of error of 4.65% and a confidence level of 95%, out of the remaining 2,781 establishments, 235 were randomly contacted over the phone.

The survey includes information with a representative sample of public establishments whose characteristics are very similar to other establishments around the country. No significant differences were found between the establishments surveyed and the others in terms of the share of initial, primary and full-day education being offered. The establishments surveyed show a higher share of secondary education and a marginally lower share of afternoon and morning classes.



Source: School Director Survey (IDEC-IDEICE, 2021). For national level data, the source of information is SIGERD data.

The image below shows that the surveyed establishments achieve, on average, the same educational quality as other establishments around the country, measured according to average scores in student diagnostic tests. As can be observed, there are no significant differences in any knowledge area or in any grade between surveyed and non-surveyed establishments.



Source: School Director Survey (IDEC-IDEICE, 2021), National Diagnostic Tests.

#### **Information on TV ratings**

The data presented in the report summarizes the ratings information provided to the research team for this study. According to the technical report of the firm, the data is representative for the Greater Santo Domingo and Santiago areas and covers a total of 3,567,916 individuals. To this end, the company has a panel of 927 households in these two areas, and follows up on each for an average of 2-5 years, allowing them to chart trends. Whenever a household in the panel changes, it is replaced by another household with the same demographic characteristics. The tables below detail the ratings information provided by the firm on reach (total individuals connected) and average time spent (ATS) during daytime and nighttime, respectively.

VARIABLE	DAY PART GROUP	TARGET					
RCH [Not cons TH: 0min.]	09:00:00 - 11:59:59 Complete Time Band Split (MTWTF)	Children 4-17 years old					
Year		2020		2021			
Counter	Channel\Month	NOV	DEC	JAN	FEB	MAR	APR
1	TELEANTILLAS	9,247	3,574	3,658	5,119	5,640	5,641
2	TELEMICRO	26,058	17,604	23,451	22,898	18,837	16,494
3	ANTENA 7	33,706	14,032	14,539	15,613	10,202	14,212
4	COLOR VISION	33,996	17,867	19,273	23,590	16,794	12,290
5	TELESISTEMA	32,869	25,301	24,841	21,606	15,396	14,972
6	TELECENTRO	17,211	7,490	11,306	17,397	15,193	18,572
7	DIGITAL 15	17,788	8,372	6,607	6,248	5,182	7,608
8	TELEUNIVERSO	6,894	3,621	1,188	388	449	0
9	CDN 37	8,987	3,343	4,170	4,257	2,972	2,982
10	CANAL 25	11,400	4,373	2,466	3,030	2,153	2,143

Source: Nielsen.

VARIABLE	DAY PART GROUP	TARGET					
RCH [Not cons TH: 0min.]	15:00:00 - 17:59:59 Complete Time Band Split (MTWTF)	Children 4-17 years old					
Year		2020		2021			
Counter	Channel\Month	NOV	DEC	JAN	FEB	MAR	APR
1	TELEANTILLAS	7,156	2,481	2,839	1,055	3,101	2,059
2	TELEMICRO	25,712	17,351	16,348	15,967	13,796	10,492
3	ANTENA 7	34,660	22,199	21,936	25,271	15,430	21,563
4	COLOR VISION	38,625	22,697	20,754	17,175	13,178	14,725
5	TELESISTEMA	33,270	23,905	19,657	14,567	7,826	8,113
6	TELECENTRO	30,244	23,136	21,630	21,997	17,761	18,053
7	DIGITAL 15	13,002	6,997	5,537	5,731	2,299	2,707
8	TELEUNIVERSO	5,737	1,567	1,208	2,509	218	1,222
9	CDN 37	9,174	4,431	6,675	3,008	2,382	4,222
10	CANAL 25	5,512	1,912	1,492	956	1,595	927

Source: Nielsen.

VARIABLE	DAY PART GROUP	TARGET					
ATS%	09:00:00 - 11:59:59 Complete Time Band Split (MTWTF)	Children 4-17 years old					
Year		2020		2021			
Counter	Channel\Month	NOV	DEC	JAN	FEB	MAR	APR
1	TELEANTILLAS	10.74%	6.93%	7.13%	6.29%	8.75%	18.20%
2	TELEMICRO	20.55%	22.97%	20.92%	21.13%	17.31%	14.18%
3	ANTENA 7	29.06%	12.00%	24.20%	9.45%	5.25%	19.54%
4	COLOR VISION	25.35%	17.33%	25.61%	15.85%	12.28%	12.25%
5	TELESISTEMA	27.98%	27.31%	18.14%	19.65%	16.53%	16.02%
6	TELECENTRO	24.66%	13.61%	24.90%	11.12%	15.88%	18.14%
7	DIGITAL 15	36.20%	20.24%	8.86%	22.36%	2.76%	6.86%
8	TELEUNIVERSO	29.02%	21.68%	7.27%	0.03%	0.56%	0.00%
9	CDN 37	12.44%	8.77%	3.81%	2.36%	3.50%	0.73%
10	CANAL 25	26.62%	19.08%	22.62%	28.23%	15.74%	10.01%

Source: Nielsen.

VARIABLE	DAY PART GROUP	TARGET					
ATS %	15:00:00 - 17:59:59 Complete Time Band Split (MTWTF)	Children 4-17 years old					
Year		2020		2021			
Counter	Channel\Month	NOV	DEC	JAN	FEB	MAR	APR
1	TELEANTILLAS	22.20%	4.83%	5.79%	1.59%	7.95%	0.44%
2	TELEMICRO	19.23%	20.23%	17.21%	10.87%	11.75%	17.58%
3	ANTENA 7	13.54%	14.82%	12.74%	11.09%	7.63%	12.45%
4	COLOR VISION	16.08%	17.83%	11.58%	14.12%	14.32%	12.99%
5	TELESISTEMA	18.80%	34.69%	25.50%	18.12%	10.28%	17.67%
6	TELECENTRO	32.47%	26.26%	25.22%	21.46%	21.77%	26.66%
7	DIGITAL 15	17.96%	14.40%	11.60%	3.52%	6.29%	4.99%
8	TELEUNIVERSO	24.88%	5.47%	3.24%	0.99%	0.02%	0.52%
9	CDN 37	10.77%	11.45%	11.40%	6.65%	13.57%	9.82%
10	CANAL 25	4.90%	2.95%	2.26%	1.33%	2.27%	9.32%

Source: Nielsen.











