Parental experiences during remote education in Paraguay: a comparison between the beginning and the end of 2020

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Juan Ignacio Mereles
MSc. in Elaboration, Management and Evaluation of Scientific Research Projects
Institution: Universidad Nacional de Asunción (UNA)
Address: España, 1098, Asunción, Paraguay
E-mail: jimereles@facen.una.py

Valentina Canese
Ph.D. in Curriculum and Instruction
Institution: Universidad Nacional de Asunción (UNA)
Address: España, 1098, Asunción, Paraguay
E-mail: vcanese@fil.una.py

Jessica Amarilla
Master in Education
Institution: Universidad Nacional de Asunción (UNA)
Address: España, 1098, Asunción, Paraguay
E-mail: isl-jamarilla@fil.una.py

ABSTRACT
During 2020 education underwent significant changes due to the abrupt interruption of face-to-face instruction around the world due to the impact of the COVID-19 pandemic. This study presents a comparison of parent’s perspectives in Paraguay during two periods, at the beginning and at the end of the school year. A sample of 505 parents participated in the first phase, and 202 in the second phase. Data were collected through online questionnaires in both phases. The results show that parents were forced to purchase electronic devices, mainly computers, to respond to certain school activities, despite the economic recession of the pandemic moment. WhatsApp played a very important role at the beginning of remote classes, both to maintain communication and/or send academic assignments. However, by the end of 2020 the use of digital educational platforms was widespread as reported by parents. Support of school activities was carried out by mothers for the most part. Difficulties evidenced include the comprehension of tasks, motivation and the internet connectivity, which increased significantly throughout the year. A majority of parents expressed satisfaction with the implementation of ICT in remote education, and the main reason noted was the fear of sending children to schools in-person.

Keywords: COVID-19, remote education, parents, experiences, perspectives.

1 INTRODUCTION

The COVID-19 pandemic in 2020 affected basically all social sectors in the world and caused important changes. Governments were forced to plan and design public policies to reduce the consequences of this pandemic. In many regions, COVID-19 arrived unexpectedly and very quickly,
which triggered many unpleasant and unthinkable scenarios. Adaptation to a different life took place all over the world as fear became more and more intense. As social uncertainty increased, many activities that were normally carried out in person were suspended, forcing many institutions and companies to close their doors, in some cases permanently, or to take other drastic measures (World Bank, 2021). This caused an economic crisis for many families around the world, hindering several aspects, including education, which depend directly or indirectly on the economic situation of the household. This economic crisis was even cataloged as one of the worst since World War II (World Bank, 2020).

One of the major concerns in the world was how to give continuity to education, since several countries decided to close the doors of their educational institutions to in-person classes. In this sense, it was decided to apply several mechanisms and procedures to avoid stopping it, according to the reality and situation of each country. This is how the so-called remote emergency education due to COVID-19 emerged as a necessity using ICT, mainly through digital platforms to carry out the learning process (Hodges et al., 2020; Misirli & Ergulec 2021; Jandrić, 2020). The use of technology in education already represented a practice that had been going on for some time, so technological tools such as computers, and others, became indispensable in this field (Zawacki-Richter and Latchem, 2018). In the context of remote education Hodges et al (2020) point out the following:

The primary objective in these circumstances is not to re-create a robust educational ecosystem but rather to provide temporary access to instruction and instructional support in a manner that is quick to set up and is reliably available during an emergency or crisis (p.6).

Paraguay joined the list of countries with the first cases of COVID-19 in March (MSPBS, 2020). Since then, the different ministries have been working to minimize the impact of COVID-19 on all sectors; education was one of the priorities. The education of millions of students at all levels could not stop, as this could have a negative impact on many social aspects. However, the migration from traditional education to a totally new modality represented a huge challenge for many educational actors (Garcia Aretio, 2021), as not only educational aspects had to be considered, but also many socioeconomic and other factors. All educational actors were affected in some way at the onset of the pandemic in the educational context in 2020 (Author, 2021; Campoy et al., 2021).

The Ministry of Education and Science (MEC) developed mechanisms to make remote education possible from Paraguayan homes. During the first months of the pandemic, the different sectors of the Ministry worked hard to ensure that the development of educational activities did not suffer considerable delays. One of the projects carried out was called "Your school at home", in which a digital platform was designed where different educational resources were available for teachers and students (and parents at the same time), from the initial to the middle levels, to develop classes even with the use of cell phones (MEC, 2020). The need to generate resources for all disciplines on a daily basis forced this state portfolio
to accelerate all processes and use the available means of communication, and create some new ones, to reach as many people as possible involved in this context (MEC, 2020). Thus, as mentioned by Reimers and Schleicher (2020), at the beginning of the pandemic it was necessary to "ensure adequate support for the most vulnerable students and families during the implementation of the alternative education plan" (p.9).

Teachers, students and parents, in the aforementioned year, used these resources provided by the MEC through the means available at that time. The level of difficulty in the use of these tools depended on the experience these actors had before the pandemic, but there is no doubt that parents’ adaptation to the process of remote teaching was somewhat more difficult, considering they had to share several roles at home and face other challenges as well (UNICEF, 2020), in addition to the different situations of difficulty experienced by the situation (Alvarez and De la Riva, 2021 and Mishra et al. 2020). Studies such as that of Garbe et al (2020) suggest that even though these aspects were present, there was some satisfaction from parents about the closure of educational institutions and the support provided by the institutions.

The role of parents or guardians was fundamental in this remote learning process of their sons and daughters. Works such as those of Aladsani (2021), Bunga et al (2021) and Lau et al (2021) argue that they were the ones directly involved in the development of the children's school activities.

In this context, the main purpose of this study was to compare some characteristics, lived experiences and perspectives of school-children parents, at the beginning of remote classes in March and at the end of the 2020 school year, to distinguish the possible influential factors in the process of educational transition to remote from the parents' perspective.

2 METHODS

The study was implemented in two important periods of time during 2020; at the beginning of the health restrictions in Paraguay, which occurred in March, and in December, at the end of the school year, when there was already a well-marked experience in terms of remote adaptation to remote education by the different educational actors, especially parents of early childhood and elementary school children in public and private Paraguayan educational institutions. In the first phase, 505 parents participated, while 202 participated in the second phase. In both phases, most parents had up to two school-aged children (82% and 88% respectively). Most of the participating parents were well-educated, with about 70% in each phase having a higher or postgraduate level of education.

Digital surveys were applied with closed and open questions aimed at collecting information related to access to computer technologies, types of school activities proposed by teachers, the level at which the children were studying, the means used to maintain communication and send the children's
activities, the main person responsible for accompanying school activities at home, difficulties encountered during the entire teaching-learning process of the children, the level of satisfaction with respect to remote teaching and the prospects for the future. The online questionnaires were socialized through emails, WhatsApp and Facebook groups. The first part of each questionnaire indicated the purpose of the survey and that the data provided would be treated as completely confidential, safeguarding the integrity of each participant.

Data analysis contemplated qualitative and quantitative aspects. Descriptive and comparative statistical methodologies such as the chi-square test were applied. In the latter, if the resulting test is significant at 5%, the categories of non-numerical variables that had statistically significant differences were observed by means of the post hoc Chi-squared test. Comparisons were made between the responses given in the first and second phases of the study. The Chi-squared test was also used for the purpose of studying the existence of possible associations between variables of interest. The R statistical tool facilitated the calculations and the generation of the comparative tables and graphs, with the implementation of different data visualization packages and statistical computation. Open-ended answers were coded and analyzed using content analysis strategies. This article includes some excerpts from the qualitative answers to illustrate and further elaborate on the results provided by the statistical analysis.

3 RESULTS
3.1 TECHNOLOGICAL RESOURCES

At the beginning of the implementation of digital tools to give continuity to educational activities in 2020, there were high percentages of parents who reported not having computers at home to carry out some of the activities proposed by the educational institutions their children attended before the health restrictions. In Asunción (the country’s capital city) and in the Central Department (its metropolitan area), these percentages varied between 17 and 21. However, for the other departments in the country as a whole, this percentage rose to 46, showing a very marked inequality in terms of owning or having access to computers at that time. Educational needs forced parents to purchase at least one computer, as reported at the end of 2020. Asunción had the highest proportion of parents having to acquire this type of electronic device (Figure 1). This proportion is statistically higher than those observed in the Central department and in the rest of the country ($\chi^2 = 6.1, p = 0.047$). For the second phase of the study, the percentages of parents who expressed not having this tool decreased significantly compared to the first phase, according to the post hoc chi-square test. Among the other responses, no significant differences were evident, except for "fewer than one per school-age family member" which experienced an increase of more than 30 percentage points according to the responses given by parents in the second phase of the study. Some comments from parents regarding these resources also stand out: "We manage it well, we have the tools
and we can guide them. Unfortunately, not all families have the necessary resources" and "We need better Internet service and community projects for the acquisition of equipment".

Figure 1 Ownership and compulsory purchase of computers

<table>
<thead>
<tr>
<th>Computer ownership</th>
<th>Asunción (Capital)</th>
<th>Central Department</th>
<th>Rest of the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>38%</td>
<td>62%</td>
<td>55%</td>
</tr>
<tr>
<td>Sí</td>
<td>62%</td>
<td>38%</td>
<td>45%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compulsory computer purchase</th>
<th>Asunción (Capital)</th>
<th>Central Department</th>
<th>Rest of the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>60%</td>
<td>40%</td>
<td>55%</td>
</tr>
<tr>
<td>Sí</td>
<td>40%</td>
<td>60%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Regarding the type of internet connection, at the beginning of the quarantine due to Covid-19, 72% of the parents residing in Asunción and 60% of those living in the Central Department reported having an unlimited internet connection. These percentages increased for the second phase, however, these increases were not significant according to the post hoc test. Meanwhile, in the rest of the country at the beginning of 2020, the highest percentage of parents (67%) reported having a limited internet connection. In this case, there was a significant decrease in this percentage for the second phase of the study (Figure 2). In this same phase, the majority of parents, in the three categories of residence considered, reported a forced acquisition of more internet services. The highest proportion of parents with this situation was observed (67%) in areas other than the capital city and its metropolitan area as shown in Figure 2. One of the parents' views reflected this situation as he expressed that there was "a lot of expense with Internet recharges, nothing was free".

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Parents also reported that during distance classes they used different digital media to continue to maintain communication with their children's teachers. At the beginning of ICT-mediated education, WhatsApp was the most used medium throughout the country. Educational platforms were being used very incipiently at this early stage as were emails. However, by the end of the school year, a more frequent use of videoconferencing and educational platforms was evidenced in Asunción and a more frequent use of WhatsApp and educational platforms was still prevalent in the Central department and the rest of the country. Table 1 shows the different means of communication used, according to parents' reports. In addition, in the same table, the summaries of the chi-square tests are reported with the corresponding p-values, indicating those showing significant differences with an asterisk.
Table 1 Means used to maintain communication with teachers

<table>
<thead>
<tr>
<th></th>
<th>First phase</th>
<th>Second phase</th>
<th>$\chi^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asunción (Capital)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WhatsApp</td>
<td>56 %</td>
<td>42 %</td>
<td>2.56</td>
<td>0.109</td>
</tr>
<tr>
<td>Educational Platforms</td>
<td>37 %</td>
<td>62 %</td>
<td>9.25</td>
<td>0.002*</td>
</tr>
<tr>
<td>Email</td>
<td>38 %</td>
<td>49 %</td>
<td>1.71</td>
<td>0.191</td>
</tr>
<tr>
<td>Text messaging</td>
<td>7 %</td>
<td>4 %</td>
<td>0.06</td>
<td>0.81</td>
</tr>
<tr>
<td>Videoconferences</td>
<td>8 %</td>
<td>64 %</td>
<td>66.8</td>
<td>&lt; 0.001*</td>
</tr>
<tr>
<td><strong>Central Department</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WhatsApp</td>
<td>73 %</td>
<td>83 %</td>
<td>2.79</td>
<td>0.095</td>
</tr>
<tr>
<td>Educational Platforms</td>
<td>25 %</td>
<td>49 %</td>
<td>13.16</td>
<td>&lt; 0.001*</td>
</tr>
<tr>
<td>Email</td>
<td>26 %</td>
<td>17 %</td>
<td>2.41</td>
<td>0.12</td>
</tr>
<tr>
<td>Text messaging</td>
<td>5 %</td>
<td>4 %</td>
<td>0</td>
<td>0.999</td>
</tr>
<tr>
<td>Videoconferences</td>
<td>7 %</td>
<td>47 %</td>
<td>47</td>
<td>&lt; 0.001*</td>
</tr>
<tr>
<td><strong>Rest of the country</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WhatsApp</td>
<td>96 %</td>
<td>92 %</td>
<td>2</td>
<td>0.15</td>
</tr>
<tr>
<td>Educational Platforms</td>
<td>9 %</td>
<td>35 %</td>
<td>30</td>
<td>&lt; 0.001*</td>
</tr>
<tr>
<td>Email</td>
<td>10 %</td>
<td>9 %</td>
<td>0.021</td>
<td>0.884</td>
</tr>
<tr>
<td>Text messaging</td>
<td>14 %</td>
<td>7 %</td>
<td>2</td>
<td>0.127</td>
</tr>
<tr>
<td>Videoconferences</td>
<td>3 %</td>
<td>26 %</td>
<td>34</td>
<td>&lt; 0.001*</td>
</tr>
</tbody>
</table>

*Significant

Table 2 reports the main channels or media that were used to send homework, materials and other resources for learning. Once again, it can be observed that WhatsApp was the main medium used by teachers and parents to send these messages at the beginning of this teaching modality. However, in the second phase of the study, important changes in terms of use were evidenced. In Asunción, a significant decrease was observed in terms of WhatsApp use ($\chi^2 = 10.82, p = 0.001$) and an increase, also significant, in the use of online educational platforms ($\chi^2 = 24.26, p < 0.001$). In the Central department there was also a significant increase in the use of educational platforms; the other percentages did not undergo significant changes. As for the rest of the country, the percentage of parents using WhatsApp decreased 14 percentage points by the end of 2020, which turned out to be a significant decrease ($\chi^2 = 14.20, p < 0.001$). In addition, the use of educational platforms increased 30 percentage points, which again turned out to be significant ($\chi^2 = 31.30, p < 0.001$).

Table 2 Means used for assignment delivery and submission

<table>
<thead>
<tr>
<th></th>
<th>First phase</th>
<th>Second phase</th>
<th>$\chi^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asunción (Capital)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WhatsApp</td>
<td>52 %</td>
<td>24 %</td>
<td>10.82</td>
<td>0.001*</td>
</tr>
<tr>
<td>Educational Platforms</td>
<td>45 %</td>
<td>87 %</td>
<td>24.26</td>
<td>&lt; 0.001*</td>
</tr>
<tr>
<td>Email</td>
<td>32 %</td>
<td>40 %</td>
<td>1.05</td>
<td>0.305</td>
</tr>
<tr>
<td>Facebook</td>
<td>0 %</td>
<td>0 %</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Central Department</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WhatsApp</td>
<td>79 %</td>
<td>67 %</td>
<td>3.31</td>
<td>0.069</td>
</tr>
<tr>
<td>Educational Platforms</td>
<td>30 %</td>
<td>58 %</td>
<td>16.58</td>
<td>&lt; 0.001*</td>
</tr>
<tr>
<td>Email</td>
<td>21 %</td>
<td>16 %</td>
<td>1.07</td>
<td>0.301</td>
</tr>
<tr>
<td>Facebook</td>
<td>1 %</td>
<td>0 %</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Rest of the country</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WhatsApp</td>
<td>94 %</td>
<td>80 %</td>
<td>14.2</td>
<td>&lt; 0.001*</td>
</tr>
<tr>
<td>Educational Platforms</td>
<td>6 %</td>
<td>36 %</td>
<td>31.3</td>
<td>&lt; 0.001*</td>
</tr>
<tr>
<td>Email</td>
<td>5 %</td>
<td>4 %</td>
<td>1.26</td>
<td>0.262</td>
</tr>
<tr>
<td>Facebook</td>
<td>0 %</td>
<td>4 %</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Significant
3.2 SUPPORT AND PERCEPTION REGARDING SCHOOL ACTIVITIES

Both at the beginning and at the end of 2020, the responses showed that the children's school activities were mainly followed up by the mother. More than 50% of the participants, in both phases and in all three areas of residence, expressed this fact. In the second phase in Asunción, there was a significant increase in the proportion of participants who stated that other people, other than the parents, were providing this follow up. There were also moderate percentages (between 22 and 33%) of responses indicating that homework follow-up was being shared by the mother and father to a similar degree (Figure 3). Other activities prevented mothers and fathers from accompanying their children in this process. In this sense, one mother stated that "a mother does not have time to develop the contents for her three children, while she also works, and does other household chores, [and] while the children go to the bathroom, eat, play, etc. (the father does not live with us and also works)". Another mother indicated that they were "trying to do it a little at a time… it is quite difficult because it is very different to be in the educational environment with the teacher and another with the mother and at home..." and another that "mom is also working at home, the other siblings also require attention and interfere with the homework… a lot of distractions." These comments support the fact that mothers were the main ones in charge of accompanying their children in their studies from home.

Figure 3 Follow-up of children's activities

Figure 4 shows the perceptions that parents had regarding the amount of homework proposed by teachers. In both phases of the study there were high percentages of parents who indicated that the amount of homework was adequate according to the pandemic context. However, despite the fact that in the first
phase there were low percentages of parents who reported that homework was excessive, increases of at least ten percentage points were observed in the second phase. In Asunción and Central these increases were not significant according to the post hoc test, while in the rest of the country the increase experienced was significant, considering the same test. In this case, there was an increase of 31 percentage points. As can be observed, parents had different positions on this regard. One of the parents stated that "The amount of homework should be the right amount and that the content should be necessary for the grade or cycle they are in." Another parent mentioned that "I feel that the time dedicated to homework is too little compared to what they do at school. In addition, it would be nice to have the teacher's support to tell us what to play with them or how to approach the classes." One participant also pointed out that "Parents continue to work remotely at home, so we do not have enough time to follow up on too much homework."

3.3 DIFFICULTIES EXPERIENCED

In both phases of the study, high percentages of parents reported having at least one difficulty related to their children's educational process. At the beginning of the distance classes, about 70% of them reported experiencing difficulties. At that time, the biggest problem reported was the lack of understanding of the tasks assigned by the teachers. Thirty-one percent of parents reported this difficulty. Comments such as:

At the beginning it was not clear to them when to hand in their homework or how... if they had to do it with pencil and paper and take a picture or if they had to type it, etc.
Since they had little time to develop the subjects in class, it seems a little complicated for them to understand it, especially subjects such as Mathematics, Physics and Chemistry. It is more difficult for us parents to understand [assignments] because today they have a different teaching from ours, from what it was in our school days.

By the end of that school year, all the responses related to difficulties experienced significant increases, except lack of access to materials. Those with the highest levels of increases were those related to lack of motivation, internet connection problems and, again, lack of understanding of assignments. However, also reported, but in smaller proportions, were problems of access to certain materials, lack of teacher support, lack of knowledge in the use of ICT and lack of access to technology (Figure 4). Some other responses from parents regarding difficulties included:

- Lack of interest on the part of children.
- One thing is to go to school or college and another thing is to be at home with mom...
- The ease with which children are distracted by things that are happening around them.
- Lack of stable internet connection.
- There are many and some are irrelevant. Not everyone has textbooks yet and this makes it difficult to do. The explanations are left to the parents and that also makes it difficult.
- The lack of electronic devices, the dedication and lack of experience with teaching content.
- That they need to use a computer or phone each and we parents also need to work at the same time with the same computers.

3.4 LEVEL OF SATISFACTION WITH ICT IMPLEMENTATION

Parents also reported on their level of satisfaction with the use of ICT in 2020 as an alternative to provide continuity to the educational process. The distribution of the levels of satisfaction was
discriminated by residence. Figure 5 shows that in the three categories of residence there are high
percentages of parents who said they were satisfied or totally satisfied with this implementation (more
than 50% in each residence). However, the highest proportions of parents with these levels of satisfaction
were observed in Asunción and the rest of the country. The differences were significant according to the
results of the chi-square test. Some of the main reasons expressed by parents are the protection of their
children and family environment and the uncertainty that prevailed at the end of 2020. In this regard, one
parent expressed the following:

I consider that favorable environments must be provided to adopt preventive measures and I do
not consider that schools are prepared to ensure social distancing between students taking into
account the infrastructure, the number of teachers if the groups are to be divided into bubbles, the
implementation of measures for the exit and entry so that they do not cross each other, that teachers
are prepared to face, besides the academic aspect, the control of the application of preventive
measures (in young children in our case) such as the use of masks and distancing. To this day there
are no tentative plans on how to deal with it and this generates even more doubts in my mind. In
my house I have people at risk and the authorities want me to sign an authorization making me
responsible, even though I will not be with my son at that time. Where is the shared responsibility?
When they show me that they are capable of separating all the students in a class at acceptable
distances, that they will be able to control the proper use of masks on all students, hand hygiene,
that a huge number of students and parents will not gather at the exit and entrance, then I will be
able to consider that it is possible to continue with on-site classes while living with the virus.

About 3% of parents mentioned that they were totally dissatisfied with the implementation of ICTs
in the rest of the country and between 17 and 24% (between dissatisfied and totally dissatisfied) in
Asunción and Central. Among the main reasons for disagreement expressed by parents, the following
stand out:

Children need face-to-face classes to learn.
Face-to-face they learn better, because they can make their doubts.... mainly in Mathematics.
Children learn very little and because teachers lack a lot of preparation and training to teach virtual
classes.
The virtual system implemented in 2020 was too poor, pure improvisation... So it is not worth
continuing to experiment to the detriment of the education of young people.
Closer student-teacher interaction is required and between classmates or other classrooms.
Children should not spend so much time exposed to screens. There is a need for other physical
activities and recreational activities at recess, school entrance/exit.

On the other hand, the statistical association between difficulties and the number of tasks was
analyzed, and this association was found to be significant ($\chi^2 = 28.42, p < 0.001$). In other words, the
amount of homework had a significant influence on parents reporting difficulties.
4 DISCUSSION

The COVID-19 pandemic undoubtedly generated one of the greatest educational disruptions at the global level. The transformations in this area occurred in all scenarios. Teachers, students and parents from different educational levels were mainly involved. The adaptations were forced, but very necessary in order not to lose a year in education (Author, 2021). Several methodologies were established and implemented to make the emergency educational process more bearable from home. Everyone experienced a different reality from the place where they were in that pandemic year, however, the situation was more difficult in cities with smaller populations (Parczewska, 2021). But it is interesting to note that, despite the many negative situations that occurred, it was a year of much learning for the entire educational community, full of challenges and also of opportunities (Adedoyin & Soykan, 2020; Author, 2021), since there were several events that would help to promote an improvement in the quality of education with the increasing support of technologies, something that had already been analyzed for some years and that the pandemic greatly accelerated.

This study reveals how parents were carrying out the learning process of their children at home, the main difficulties encountered and the level of satisfaction with ICT-mediated remote education in 2020. A significant number of computers were owned at home, mainly in Asunción and in the Central Department. Computer ownership increased by the end of the year indicated, as some school activities...
required this device for their normal development. The latter implied an obligatory purchase of this technological tool, nowadays so essential in the educational area (Zawacki-Richter & Latchem, 2018).

The type of internet connection available at the time also underwent significant changes. Many families were forced to purchase increased internet services, in some cases even switching from a limited to an unlimited connection, which by the nature of the type of connection has a higher cost. The obligatory purchase of computers and the acquisition of more or new internet services may have had an impact on the economic aspect of the family, even more so given the uncertainty about the economy of the country and even of the entire world at that time.

Many digital tools of normal use for the majority of the Paraguayan population, such as the messaging service WhatsApp, played important roles for communication and the sending of school assignments from the beginning of remote classes until the end of 2020. In the last two months of that year, a greater use of online educational platforms was evidenced as main resources for teachers, students and parents to interact, educationally speaking, in a more focused way. However, it is noteworthy the use of more and diverse educational technological resources as distance classes developed, which was to be expected due to the style of process being considered. The openness of many institutions and companies, releasing educational materials, also helped to make access to content on different subjects more efficient.

An interesting variety of educational resources and activities were used (Lockee, 2021) to make children's learning as meaningful as possible, taking into account the reality of each family at the time.

High percentages of parents, depending on the place of residence, stated that in the context of the pandemic, the amount of homework that teachers proposed was adequate at the beginning of the quarantine. However, the findings in the second phase suggest a certain overload for students, and therefore for their parents, since the number of activities at home made the change of roles for the parents constant and the time very limited to address them all. This situation was observed in greater proportions in the rest of the country, where the academic preparation of the parents is, in general, lower compared to those residing in Asunción or in the Central Department.

The difficulties reported by parents ranged from Internet connectivity to motivation problems. Depending on the place from where the parents connected to the Internet, the Internet signal was not always good, which implied delays in receiving and/or sending the children's homework; this coincides in part with what was reported by Álvarez and De la Riva (2021) and Mishra et al. (2020). They also had to deal with the motivational aspect in relation to their children (Garbe et al., 2020; Mak, 2021) or with the distractions that arose and were easily incorporated by the children, mainly the younger ones. In addition, considering the academic activities proposed, almost half of the parents agreed that they were very difficult to understand, either because they had almost total ignorance about the subject matter or simply because they did not have enough guidance to carry them out (Haller & Novita, 2021). The findings
also show that mothers were the main responsible for following up their children’s process in almost all cases of remote education at home, as suggested by other research (Aladsani, 2021; Bunga et al., 2021; Lau et al., 2021).

Despite the fact that the educational situation was complicated in 2020, most parents were satisfied with the use of digital tools to develop classes from home, coinciding with what Garbe et al. (2020) stated, since the fear of the dreaded virus was greater than losing their children's education or not having the desired significant learning. This shows that the priority for parents was the physical integrity of their children and, therefore, that of all members of the household due to the easy contagion of this terrible coronavirus (Mallapaty, 2020; WHO, 2020).

5 CONCLUSIONS

Remote education in 2020 became difficult, because not only was there concern for this sector of the "normal life" of society, but also for aspects related to health and economy. Several educational proposals were considered by those responsible for education in each country to try to balance the coexistence of students with other members of the household, to promote a non-presential but empathetic relationship with teachers and to obtain "more or less" satisfactory results in terms of student learning. In spite of all this, it was not possible to avoid certain negative results that greatly harmed the different educational actors involved in this transition of the teaching-learning process through technology, since there was not enough time for the preparation of teachers, students and the educational institutions themselves, nor were there the necessary infrastructures for what the migration from face-to-face education to virtual environments implied.

The variety of characteristics of each educational actor influences whether difficulties are greater or lesser, whether or not they have access to technologies, or whether anxiety or stress levels are higher. The findings in this study show that parents had some access to technological tools such as computers and the Internet, especially in Asunción and surrounding areas. However, the gap in technological access remains large with respect to those parents living in other cities or areas of the country. This is a very important aspect that educational institutions should keep in mind from now on, since post-pandemic education will not be the same as the one developed before this health crisis.

It is hardly debatable that there is still much room for improvement in the different aspects of education. A huge effort was made to maintain a stable education without major drawbacks, however, the changing situation in short periods of time prevented this from materializing. Throughout 2020, the remote educational environment presented different difficulties to parents. The overload of school activities made it difficult for children to adapt and learn meaningfully and, of course, to reconcile parental roles at home. The children's motivation became difficult to maintain since the physical absence of the teachers was very
noticeable. This became more acute during the last stages of the 2020 school year, with accumulated stress from other situations.

On the other hand, there was a very balanced opinion of parents regarding the development of ICT education during 2020. The uncertain health situation even in that year influenced parents to respond that they preferred their children to continue with classes in that way than to expose them by sending them to schools or colleges. Others felt that the implementation of remote education was not effective, resulting in a state of dissatisfaction with the process.

Parents' experiences were diverse in the educational environment of their children in 2020. The difficulties could become challenges to somehow enhance ICT-mediated education and may serve to start thinking about possible hybrid modalities of education that could be raised and carried forward in a similar context or even when returning to the "new normal". The COVID-19 pandemic made it possible to observe certain gaps in education that had to be filled in a short period of time. It is important to continue research along these lines on how the use of ICTs evolves in the new contexts that unfold as health restrictions become more flexible. It remains to be seen whether the innovations adopted to deal with the pandemic have a lasting effect.
REFERENCES


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