



**Parents Role in Virtual Education after COVID-19 in a Public Rural Institution  
from Ecuador**

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## **Parents Role in Virtual Education After COVID-19 in a Public Rural Institution from Ecuador**

In December 2019, the world faced the largest pandemic outbreak when China declared the first case of COVID-19. The affectation on humans began with a common cold until it reached more severe diseases causing death (World Health Organization [WHO], 2019). In March 2020 the virus spread around the globe and became the first pandemic of the XXI century. So forth, this virus changed life how was knew it and a new global order started.

The pandemic outbreak obligated governments around the world to take action to avoid the spread of the virus. One of the actions taken in many countries was a lock-down policy to conserve the distance between persons also known as quarantine this was recommended by the World Health Organization in 2019. This situation made people change their way of living and look for alternatives to continue their daily routines at home, work, and so forth.

For many years several studies have shown how important the role of parents is in children's education. Especially knowing that the most significant involvement is where parents and children work directly on learning activities at home (Cotton & Wikelund, 1989). In the context of COVID-19, education suffered some changes, and probably the role of parents increased even more. Lockdowns have forced the digitization of education which in turn increases the digital inequalities among students (González-Betancor et al., 2021)

One of the biggest changes was virtuality in education. Because it was mandatory during the pandemic to receive virtual classes instead of in-person at all levels. In this scenario, students suddenly started a new way of education without the full guidance of their teachers, as they were used to. This resulted in new problems that

affected parents and the academic performance of students, for example, the lack of knowledge in the use of technological devices, the use of teaching materials sent by teachers to parents, the lack of implementation of new learning strategies, and peers feedback, among others.

These problems became more evident in the rural areas of Ecuador where low-income families send their children to public institutions. In addition, the level of education in most of the parents from rural areas is very low. Furthermore, the number of family members is high to give them appropriate guidance for all of them.

The purpose of this study is to explore parents' role in virtual classes during the pandemic and evidence of difficulties that they experienced. Aiming to determine if applying better guidance techniques with their children influences the results obtained from the school. A workshop was the tool implemented where parents learned better ways to keep track of their children's studies at home and help them with their assessments. Also, they compromised to dedicate more time to them.

For this research, 21 parents and their children from one rural public institution in Ecuador were chosen. The investigation method used was pre-experimental with a comparison analysis where parents participated in a workshop to improve their role at home and the results were measured before the implementation and after it, using the grades of their children. The study addressed this research question: 1. To what extent would students improve their grades after their parents participate in the workshop "Study Techniques at Home"?

### **Literature Review**

The purpose of the following literature review was to define the educational methods implemented during the Covid 19 pandemic, the importance of access to technology, and the fundamental role of parents in home education.

## **Information Technology and Education**

Information and Communication Technologies (ICT) is understood as a set of tools involving hardware and software, considering them as a necessity and basic work tool for teachers and students (Tobón et al., 2018). These tools became the most used during the pandemic to maintain the world running in diverse fields like economics, education, and communications, among others. In education apps like Zoom, Microsoft Teams or WhatsApp were the ones who played a key role in virtual classes.

Online learning provides more experience, for the process of learning that balances the development of time and technology based on self-regulatory capabilities, parents should control time and bring support and vigilance during the development of homework and other activities (Basar et al., 2021). Otherwise, with no parent involvement, the experience could not be complete, and students would face difficulties in the process. Also, not having experience using computers was a challenge that students faced.

Gaillard (2001) explained that a big difference exists between people who have knowledge and experience with technology from those who have not access to it. So, to implement ICT in virtual education parents and children must have a minimum knowledge of how to use the internet and computers. In this way, there would not be a line to interfere with virtual education.

In Ecuador, students from private and public schools located in urban areas with access to the internet carried out the learning process in applications like Zoom, Google Met, and Microsoft Team, among others. In this model of education, parents must be present to maintain a balance in online learning (Lathifah & Helmanto, 2019 as cited at Puspita, 2021).

The pandemic obligated teachers to face a new stage in education where the primary approach was virtually in this new scenario conventional teachers were challenged because they did not have previous experience in this type of education (Stoian et al., 2022). For this reason, education in this environment adopted new strategies to give the proper continuation of the activities needed. All to fulfill the scholar year and not detain education during this period.

### **Rural Education During Covid 19**

In rural areas, students faced a lack of internet access which resulted in the necessity of different distance learning approaches (Apriyanti, 2020). One way to contact parents and students during COVID-19 in Ecuador was through WhatsApp groups created to share teaching material. Students who did not have any source of communication devices needed to attend the institutions to pick up worksheets with activities to develop at home. In these two ways, rural institutions assured education throughout the pandemic.

### **Importance of Parent's Role in Homeschooling**

The parents were forced to take the role of teachers at home during the pandemic. According to Puspita (2021), parental guidance to teach assignments given by teachers requires an understanding of the learning material and readiness to assist their children when they experience difficulties.

Parents' guidance is proven to be necessary for their children to achieve academic improvements “considerably greater achievement benefits are noted when parent involvement is active--when parents work with their children at home” (Cotton & Wikelund, 1989, p. 3).

Homeschooling, for teachers, parents, and students became a new way of education during the pandemic, and the responsibilities that they were used to perform

in their day-by-day changed completely with this a new role for them started. That highlighted the importance of parents' educational role with the closure of schools. Homeschooling became necessary because of the Covid 19 pandemic (Nayir & Sari, 2021). In this scenario teachers, parents and students went through new challenges in education.

### **Consequences of Virtual Education After Covid 19**

Ecuador, like many other countries in January 2022, started to reduce or control the spread of the virus COVID-19 and with this, many economic activities regained in-person attendance. Education progressively called students to the classrooms again (Comite de Operaciones de Emergencia [COE], 2022).

This encounter between students and teachers evidences the different problems that parents and children had to face during the pandemic with the realization of assessments at home. Without preparation and training, online learning results in a poor student learning experience (Puspita, 2021).

Low-income families expressed that their most serious difficulty was understanding the teaching material and not knowing how to assist their children.

“Lack of time or energy, embarrassment or shyness about one's own educational level or linguistic abilities, lack of understanding or information about the structure of the school and accepted communication channels, perceived lack of welcome by teachers and administrators, and teachers and administrators' assumptions of parents' disinterest or inability to help with children's schooling” (Cotton & Wikelund, 1989 p. 6).

To face the problem mentioned, there are some educational techniques that even with a low understanding of the teaching material parents could learn to help their children to accomplish better results at school. Shumow (1997) stated that parents at the moment of providing support and encouraging their children, value their feelings instead of their test results.

## **Workshop**

There is no fixed connotation for the term "workshop" in education, in practice, there are different opinions regarding the approach of the program, the purposes that the workshop should fulfill, its functions, and the duration of the workshop sessions (Hildreth, 1945). In this research, a one-time session was considered enough to share the techniques that parents needed to learn.

Seminars associated with this teaching style encourage the sharing of teaching activities to immediate classroom demands to keep students quiet, happily acquiescence, or to catch peoples' attention (Tabachnick et al., 1979). For parents, this translates into sharing the process with their children knowing if they applied what they learned, children would improve their grades.

The process involves an emotional/cognitive reflection participants get through, issue-based insights, and inter-personal and/or intra-personal understanding. A conscious re-structuring of experience through interpretation provides "felt" insights, and these insights can be further conceptualized by analytical distance induced by discussions and critique (Rasmussen & Wright, 2001).

## **Role Play Activity**

It is an activity of pretending to be a particular character and behaving and reacting in the way that character would (Cambridge Dictionary, 2023). Incorporating role-play activities into the teaching space increases diversity, a change of pace, and opportunities for a lot of language production (Budden, 2022).

To prepare for role-playing, teachers should divide participants into several smaller groups, each with approximately the number of participants required to act out each scenario (Hazelden Foundation, 2007). Participants can be in cooperative learning groups if they have already been established in the classroom (Brame & Biel, 2015). In

this way, parents experience and express what their children go through during their classes and especially differentiate what is good or bad parental guidance.

### **Innovation**

To carry on the research, parents needed to apply the skills learned in a workshop to their children in the second term of the school year. Most of the children were teenagers who registered for the last 2 years of school in virtual classes, due to COVID restrictions. In the first term of in-person classes from the school year 2022-2023 students obtained low grades in most of the subjects. This could be a setback in education levels because of the COVID-19 pandemic.

To proceed with the research, parents were invited to a workshop. In this workshop, parents learned the importance of helping their children with school and they also shared their experiences at the moment to assist them with good and bad examples of it.

To conduct the workshop a formative and summative assessment was considered. In the formative assessment, a role-play activity was imparted, and the summative assessment consisted of an outside classroom procedure tracking by the teacher.

First, the teacher called out to the institution on the day that parents needed to attend a one-day time workshop to learn about techniques that they could apply to their children to improve their academic results at school. The workshop lasted one and a half hours with a fifteen-minute break where the teacher divided the class into 60 minutes for the formative and 30 minutes to explain the summative assessments respectively.

The teacher started with the role-play activity but before continuing with the play parents needed to form groups. They shared what scenarios face at home with their



children at the moment to assist them. The main point here was to explore what their children think about their classes, activities, and overall performance day by day.

Then parents simulated what they do or say to them to encourage the fulfillment of their homework or study for their evaluations. At the end of this part, the teacher realizes what they did right or wrong.

Once the groups discussed their experiences, they proceeded to share with the rest of the groups. Groups were exchanging different points of view regarding the behavior of their children at home. Finally, the teacher guided them on how to assist their children with their homework and to study on their own.

When they understood the bad and good behaviors to help children with school, four representatives were chosen to play the roles. Two played the role of the bad monitor example (parent and child) and the other the good monitor techniques to help children at home (parent and child). Finally, the teacher analyzed and differentiated the presentation with the rest of the parents.

In the second part of the workshop, the summative assessment was explained by the teacher. Then parents compromised that the techniques learned in the workshop were going to be applied at home with their children. For this purpose, a WhatsApp group was created by the teacher.

In the WhatsApp group, parents shared at least once every week during the second term of the school year their experiences and evidence of how they worked with their children at home. With that information, the teacher kept track of students and observed if their academic results were related to the guidance received by parents at home.

### **Research Methodology**

The method of this study was action research with a pre-experimental methodology. A comparative analysis was used with a simple pair *t*-test. A comparison was made prior to demonstrate whether there was a significant difference in the results.

With two years of virtual education and then coming back to school students obtained lower grades one of the reasons can be the lack of guidance by parents during that time. After the application of the workshop is expected that students whose parents dedicate more time to their children's education obtain better grades at school. This research intended to answer this research question: To what extent would students improve their grades after their parents participate in the workshop "Study Techniques at Home"?

### **Participants**

The participants selected were 21 parents from a rural institution in Ecuador whose children were attending the eleventh grade during the school year 2022-2023. These parents oversaw the education of their children during COVID-19, inside families, mothers (18), and fathers (3). The person who implemented the workshop and kept a record of students' grades and improvements was the English teacher of the children's participants.

### **Instruments**

#### **Pre-grades and Post grades**

The subject selected for the study was English which according to the results presented in the first term was one of the lowest-graded subjects. The data used were grades collected in the first term of the school year (2022 - 2023) and compared with the second term.

### **Workshop**

The workshop "Home Study Techniques" aimed to improve the parental control and guidance that parents with low educational levels could apply to their children at home.

This seminar focused on six different approaches that parents could easily learn understanding that children's guidance does not mean spending hours doing homework with them or dominating the content inside their subjects, instead good parental guidance is teaching them organization skills and developing study habits.

The points addressed were:

1. Meet the teachers
2. Establish a friendly work area
3. Set a schedule for work
4. Keep distractions to the minimum
5. Make sure they do their homework
6. Be a good example

After the training, to ensure the implementation of the workshop, parents signed a commitment letter. They committed to spending at least one hour with their children working on assignments from school. They were supervised by a WhatsApp group with all participants.

### **Data Analysis**

The variables in this research were measured by a paired-sample *t*-test. This data was obtained during the first and second part of the school year. Grades were compared between them. The scores obtained were on a scale from 0 to 10. The English subject was the one who participated in the research. Parents were trained on how much time they should spend with their children working at home and learning strategies that they could apply at home.

The data obtained from grades before and after the application of the workshop were entered and codified in an Excel spreadsheet using the statistical data analysis tool to obtain: the mean, variance, standard deviation, and *p-value* to determine if there was a significant increase in student grades after the application of the workshop. the confidence interval percentage for this test was 95%, and the level of significance was ( $\alpha = 0.05$ ) the data from the *t*-test also served to calculate the effect size ( $d = \text{Mean} / \text{Standard deviation}$ ), a statistical concept that quantitatively measures the difference between the first data to the second (Durlak, 2009).

### **Ethical Considerations**

In this research, the Ministry of Education through the Principal of the institution was informed about the evaluation being conducted. So, the institution signed the consent where the description of the evaluation with the purpose and impact that the study would have on the participants was detailed.

Furthermore, participants in this case parents and legal representatives who were summoned to the workshop to develop parental guide skills for their children signed their voluntary participation in the program. They also were encouraged to sign a commitment letter where they compromised to work at home and apply all the techniques learned and report their advancements with their children on a WhatsApp group until the end of the school year.

Finally, the group of students immersed in the evaluation process was indicated to remain calm through it. They also were explained that there is no need to pass through any psychological harm like stress, anxiety, or invasion of their privacy while the evaluation was conducted.

### **Results**

To answer the research question, to what extent would students improve their grades after their parents participate in the workshop “Study Techniques at Home”? Students improve their grades after the implementation of the workshop. The result of the pre-grades showed a mean of 6.71 and the mean of grades obtained after the application of the workshop was 7.60. The *t-test: Paired two samples for means* were used to answer the research question. And it was established A null hypothesis: “There was no meaningful difference in the grades of students after the application of the workshop: Study Techniques at Home”. And the alternative hypothesis was: “After teaching the workshop: Study Techniques at Home, the students improved their grades”. The value of the null hypothesis is 0.

**Statement:** If P-value is  $>$  than  $\alpha$ , do not reject  $H_0$ , if P-value is  $<$  than  $\alpha$  reject  $H_0$

**Table 1**

*Descriptive Statistics*

	<b>Pre Workshop</b>	<b>Post Workshop</b>
<b>Minimum</b>	4.69	3.40
<b>Maximum</b>	8.96	9.18
<b>Mean</b>	6.71	7.60
<b>p-Value</b>	0.00012197	

The null hypothesis was rejected, accepting the alternative hypothesis according to the result a *p*-value of 0.00012197 is smaller than  $\alpha$  (0.5) showed an increase in student's grades, which was maintained during the development of the program.

Results indicated that active participation of parents in their children's education would have a positive impact on their grades. Most of the participants of this study improved their grades as soon as their parents encouraged them to apply study habits and the organizational skills learned from the workshop.

Only in a few cases, students did not show any improvement at all, but those were the ones who faced problems inside their families and other learning difficulties known by the teacher like abandonment of home, disabilities or behavioral problems, among others.

After the participation, a feedback session was held by the teacher with students and parents where the next comments were obtained:

Students commented that they experienced a recharged of hours on their studies. Commonly, they were used to dedicate time to study, and homework at the institution, and once they arrived home spent time on lazy activities or helping their parents, for boys, this means working with their father, and for girls doing house chores with their mother.

Parents exposed that after learning the guidance techniques they obtained the necessary tools to assist their children at home. On the other hand, other parents expressed that due to the amount of children that they have cursing the school they were not able to share enough time with each one of them.

Another behavior observed by the teacher was the lack of willingness and consistency by parents, this made the final grades of their children start to go down at the end of the second term. So, if parents had consistently used the skills learned in the workshop the result could have been higher than expected.

### **Discussion**

The results presented are similar to other studies where parents took active participation in their children's education. Showing that any kind of involvement would impact their grades positively. Parents' guidance is proven to be necessary for their children to achieve academic improvements “considerably greater achievement benefits

are noted when parent involvement is active--when parents work with their children at home” (Cotton & Wikelund, 1989, p. 3)

It was evident in the study that rural areas still have a big disadvantage to urban areas where access to technology and the Internet is affordable for most people (INEP, 2007). During the pandemic events many homes from rural areas exposed that the only technological devices possessed were smartphones. In many cases, without internet access, this affected to some degree the proper continuation of education.

This study proved that it is not necessarily higher levels of education for parents to improve children's grades. Only good organizational skills and study habits improve enormously their grades. However, as many studies suggest if parents had not lost interest in their children's studies throughout the process of this research and continued with the recommendations taught in the workshop the final result would have been higher or at least having the assistance of their teacher during the pandemic the changes would have been bigger. Volery and Lord (2000) stated that with better lecture skills online learning improves understanding and the acquisition of knowledge. Probably, parents and students with poor lecture skills were another reason to not continue with the proper guidance in virtual education.

Puspita (2021) mentioned without preparation and training online learning will result in a poor student learning experience. Parents who participated in this study also made a clear statement that their children's education was affected by the pandemic and as a result, they think is necessary to continue workshops where they learn more skills to guide them and be prepared to monitor them at all moments.

But we need to be aware that students from rural areas face some other difficulties in improving their education like having many siblings which results in parents without time to assist them properly. Among other problems mentioned in the

study. In most rural areas, commonly, students face different problems starting from their location, social status, and lack of technology, among others (De La Varre et al., 2014).

### **Conclusions**

For the problem of students' low grades after the pandemic due to the confinement or not having their teacher in front of them an intervention with parents is an alternative to help them to improve their academic scores. In this research parents were the ones addressed for the implementation through a workshop where they developed skills to supervise and help their children with their activities at home.

During the implementation of the workshop, the most common reaction of parents was to realize that applying a simple daily routine and involving in their children's studies could improve their grades enormously. This could be a result of the poor time dedicated to children's education in rural areas of Ecuador due to several reasons but primarily to the low level of education of parents and the absence of motivation for education as a way to overcome poverty.

Only a few parents dedicate time to studying and doing homework with their children. This was reflected in their grades in the first term because they did not need to improve them. Due to the knowledge of parents on good habits of study, they already applied most of the techniques from the workshop.

### **Limitations**

Despite the positive results, the major difficulty faced was receiving feedback from parents through the WhatsApp group created. In the first stage of the study, parents were participative and collaborated with all the information asked about the progress and implementation of the skills learned from the workshop. But, as the second



term passed less evidence that they were taking action and spending time with their children monitoring school activities was sent.

Regardless of the improvement in the final scores, the bad habits related to monitoring their children's studies reappeared in parents. Probably if parents continued with good parental guidance the results would it be higher.

### **Recommendations**

Future research should introduce a model where parents get continued monitoring and researchers could ensure that they are taking active participation in their children's studies.

On the other hand, these recommendations are addressed to participants:

- Teachers should offer hours of parent orientation inside the regular meetings at school.
- Parents should be helping to keep up with the routine and be a guide to show that the routine should always be upheld.
- Once the routine is established students should be encouraged to continue with the learning process.

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**Appendix 1**

**Lesson Plan**

Available upon request.

**Appendix 2**

**Grades**

Available upon request.

**Appendix 3**

**Inferential Statistics**

Available upon request.

**Appendix 4**

**Pictures**

Available upon request.

**Appendix 6**

**Parents' Consent Letter**

Available upon request.

**Appendix 7**

**Institution Consent Letter**

Available upon request.