

# CHANGES IN THE CONDITIONS OF PRE-SCHOOL EDUCATION IN THE CZECH REPUBLIC IN RELATION TO THE PANDEMIC

RADMILA BURKOVIČOVÁ,<sup>1</sup> KARIN FODOROVÁ,<sup>1</sup>

MICHAELA COCCA<sup>2</sup>

<sup>1</sup> University of Ostrava, Faculty of Education, Department of Preprimary and Primary Education, Ostrava, Czech Republic  
radmila.burkovicova@osu.cz, karin.fodorova@osu.cz

<sup>2</sup> Texas A&M University, College of Education & Human Development, San Antonio, United States of America  
michaela.cocca@gmail.com

**Abstract** The study aimed at identifying the changes in the educational conditions of pre-school children in kindergartens in the Czech Republic in relation to the coronavirus pandemic and finding out the educational experiences gained as a result of the changed conditions. A standardized open-ended interview was used in the study. The sample consisted of 17 pedagogical staff and was selected based on convenience. The findings identified 1) changes in the distance education of pre-school children in kindergartens in the following areas: the form of education; its rules; the availability of digital technology; its ease and implementation; cooperation with parents; children's participation; the objectives and content, and their implementation in activities; the evaluation of teachers' activities with children; the evaluation of the form of education; and 2) the pedagogical workers' experience with pre-school distance education in the mentioned areas. The discussion focused on the rules of distance education of pre-school children and the availability of digital technology.

**Keywords:**

educational condition, experience, kindergarten, pre-school child, teacher

## 1 Introduction

The education of children in the last year of pre-school education, i.e., the year before starting primary schooling, is compulsory in Czech kindergartens. The conditions for children's education are set out in the national, basic curriculum document, the Framework Education Programme for Pre-school Education (RVP PV) (MoE, 2018). However, with the emergence of the COVID-19 virus, these conditions have changed. From the beginning of 2020 until 11 March 2020, kindergartens in the Czech Republic implemented a program called restricted operation, where, unlike in the higher education levels, the government did not issue any binding instructions to close kindergartens and the physical presence of children was allowed.

Between 11 March 2020 and 30 April 2020, all types of kindergartens throughout the country were closed. The move was taken by the Ministry of Education (MoE) based on the finding that most children had stopped attending kindergartens across the country, as parents were concerned about their children contracting COVID-19. For the same reason, heads of kindergartens and principals demanded them to be closed. Another reason was the closure of the kindergarten that otherwise delivered food from its kitchen to other kindergartens. In many cases, this was a coordinated move by the principals and heads for one or a combination of the above reasons, depending on local conditions.

In the Czech Republic, the obligation to provide education to children belongs to the kindergarten and the implementers are the kindergarten teachers. The closure of kindergartens placed teachers, through no fault of their own, in a new situation that they had not known about in advance and thus could not prepare for. This situation was also new for the parents. They had to deal with how to keep their pre-school child occupied all day, how to educate them and combine it with their personal and professional responsibilities in the changed conditions, including the support of older children in their education.

This paper aims to present the identified changes in the educational conditions of pre-school children resulting from the closure or reduction of kindergarten operations during the coronavirus crisis and indicate educational experiences gained by the teaching staff in the changed conditions.

## 1.1 Organisation of Children's Education During the Closure or Reduction of Kindergarten Operations

If the majority of children with compulsory pre-school attendance cannot be present in person at the kindergarten, the kindergarten is obliged to provide distance education for these children and adapt the provision of education and feedback to their conditions. This situation may arise in accordance with the provisions of Section 184a of the Education Act (MoE, 2004a) (1) due to an emergency measure declared under the Emergency Act, or (2) due to the ordering of an emergency measure under a special law, (3) or due to the ordering of a quarantine under the Public Health Protection Act, which is what the COVID-19 situation corresponded to.

The goal of distance education is that no child be left out of the educational process and that each child be involved according to his or her individual abilities and conditions in the home environment. The kindergarten chooses the method of distance education regarding its material and technical equipment and adapts the method of providing distance education to the children's conditions. Activities with the child in distance education can take place online or offline.

Under normal public health conditions, children in their last year of kindergarten are prepared for primary school in what we could now call offline education. Children are given small-scale homework tasks that make use of the natural conditions of the children's home environment to reinforce, deepen, and extend their knowledge, as well as their intellectual and manipulative skills. These are mainly practical tasks, creative work, and the application of knowledge and skills in practice. A child may be given the task of preparing a meal for their parents when they come home in the evening; picking strawberries in the garden; watering the flowers; changing the water in their rabbit's water bottle; giving milk to their cat; picking flowers in a meadow, finding a picture in an encyclopaedia, etc. "The advantage of offline education is the absence of the need for technical equipment and digital competence of children or parents." (Ministry of Education, 2021, p. 4).

In online education, parent cooperation is more necessary than in the regular course of education. Generally, their presence is essential. They must participate in the child's education in terms of organization, answering their children's questions,

explaining, and guiding them in direct online contact using digital technology. In asynchronous learning, parents and children perform the tasks set at a time of their choice and at a pace suitable for the child. Performing the tasks is therefore voluntary. Given the age of the children, the teachers give the parents tips on thematic activities suitable for the home environment via an agreed communication platform.

Online learning is not a preferred method in pre-school education due to the developmental characteristics of children. Its function is merely complementary. The teacher can be synchronously connected with the child at a certain time in the same virtual location and be engaged in the same activity. It is very important that the children always receive some feedback from the teacher on the tasks and activities they have carried out and completed to encourage and motivate them. Just as we primarily organise the educational environment under standard conditions, i.e., with focus on attention length and interest, online education should be directed in the same manner.

Since distance education is compulsory for pre-school children, it is necessary to record their attendance. A duration of up to 30 minutes per week is recommended, provided that the child's family has the necessary technical equipment. Children can work on and explore various topics in their environment with their parents and then share the findings with others. This can also promote social contact between children, the kindergarten, and families.

Each of these educational forms has advantages and disadvantages, so it is recommended to combine them appropriately. Changing forms leads to the appropriate motivation and activation of the child. Distance education takes place in accordance with the RVP PV and the education program of the particular school, but because of the circumstances it is not implemented to its full extent. It is desirable for teachers to be able to create a varied range of developmental activities for all children, purposefully individualised, based on an assessment of the individual's educational progress, which best meets their current developmental needs. The actual way of organising the children's education through distance learning has been and will continue to be decided by the principals, who consider the legislation, the current possibilities and the school's conditions.

## **1.2 Parameters for Children's Education Concerning Kindergarten Teachers**

All kindergarten teachers had to fulfil their duties at the time of the closure or reduction of kindergarten operation. According to Sec. 22(a) of the Pedagogical Staff Act (MoE, 2004b) the pedagogical staff was obliged to be at the employer's workplace at the times specified in the timetable of their direct teaching activities. At the same time, however, the possibility that the teacher could agree with the principal to perform work tasks from a different place in the case of distance education, which is established under Sec. 2 of the Labour Code, was not excluded, and this also applied to teachers who were in quarantine (Parliament of the Czech Republic. (2006).

## **1.3 Ensuring Communication Between All Actors Involved in the Child's Education**

In addition to the teachers, the kindergarten staff who need to pass on information to the parents are the principal and other pedagogical staff, i.e., the speech therapist, the teaching assistant, the school assistant, as well as the head of the school canteen and the school economist. During the online education of children, information should be conveyed in a concentrated manner, grouped thematically, with determined time and frequency of communication, and it should preferably be sent out on weekdays, during working hours and well in advance.

For communication among all actors, a common communication platform with uniform common rules needs to be chosen and agreed upon, and this also needs to be incorporated into the school rules. Effective communication between all actors is essential for all parties to fulfil their roles. The role and duty of parents is to support their child and strengthen their intrinsic motivation to fulfil their obligation to learn, in this case through distance learning. If teachers designate a specific type of online service as the official communication channel, it is necessary to address cases where the child's parent does not have the necessary equipment.

For children in compulsory pre-school education, it is important to maintain the continuity of social ties and communication with peers and their teacher so that the transition to primary school, even with a digital learning method, is as effective as possible.

## **1.4 The Current Situation**

The coronavirus situation has significantly affected education of all types and at all levels. During its course, some educators decided to research selected features and their impacts on the school network. For example, Pavlas et al. (2021) report that current digital technology or low-quality internet connections were major barriers to online education in 24% (out of 1,000) of the kindergartens surveyed; 7% of kindergartens stated the lack of digital competence of teachers as a reason for the absence of online education. Other findings suggested that activities being offered regularly led to more frequent and intensive contact with children's guardians; kindergartens with fewer children, especially one-class kindergartens, made more frequent use of face-to-face contact and communication and had feedback on the success of education from the parents' perspective. An essential piece of information is that the principals expressed the belief that the central institutions had forgotten the pre-school segment and that neither sufficient information nor elementary methodological support were provided for kindergartens (Pavlas et al., 2021).

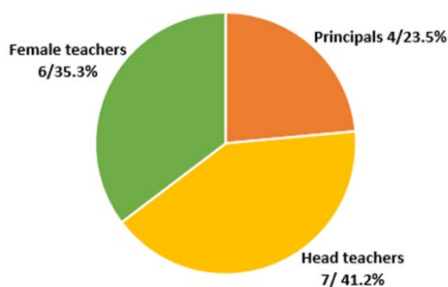
## **2 Methodology and Methods**

### **2.1 Design**

To identify the changes in the conditions of children's education in kindergartens in the Czech Republic following the closure or reduction of kindergarten operations during the coronavirus crisis and find out what educational experiences were gained by the pedagogical staff in the changed conditions, a mixed approach was employed. Furthermore, content analysis and descriptive statistics for relative frequencies was applied.

## 2.2 Sample

At the time of our investigation, increased sanitary measures were still in place in the Czech Republic. Kindergartens were closed to the wider public coming from the outside environment. Thus, the sample was selected based on convenience, consisting of 17 kindergarten pedagogical staff. The participants can be divided into two subgroups: a) management, which includes seven (41.2%) head teachers and four (23.5%) principals, as the ones responsible for the conditions of pre-school children's education in kindergartens; and b) six (35.3%) female teachers (*Figure 1*).



**Figure 1: Employment position.**

Source: own.

The respondents' level of education was examined next. Eight respondents had completed secondary education; three respondents had obtained a bachelor's degree in Kindergarten Teaching; one respondent had obtained a bachelor's degree in Special Education; and one respondent had obtained a doctoral degree in Pedagogy. Four respondents had obtained a university degree in a program other than those listed here (see *Figure 2*).

In terms of place of work, the largest group of respondents was from the Zlín Region (47.1%); followed by the Moravian-Silesian Region (23.5%); the Pardubice Region accounted for 17.6% of respondents, one respondent was from the South Moravian Region, and one from the Olomouc Region. The largest group of kindergartens were two-class kindergartens (29.4%), followed by three-class (23.5%), six-class (17.6%), four-class (11.8%), one-class (5.9%), seven-class (5.9%), and ten-class kindergartens (5.9%). There were 15 kindergartens that followed a regular education program, two that followed the Start Together educational program, and one kindergarten that followed Montessori pedagogy.

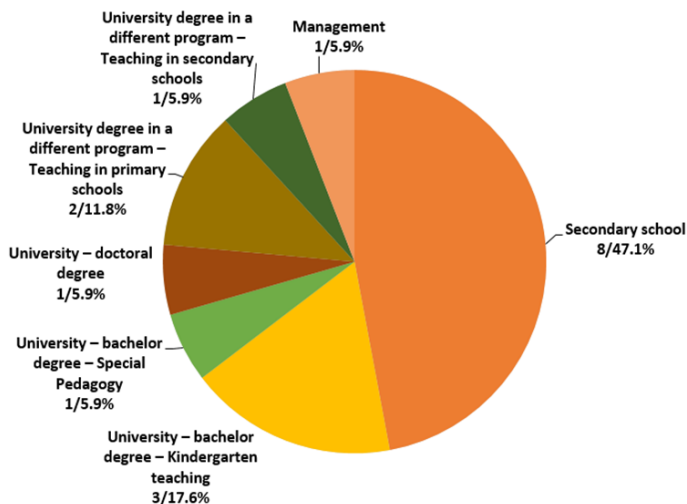


Figure 2: Respondents' Obtained Level of Education.

Source: own.

### 2.3 Instruments and Procedure

The data was collected using a standardized open-ended interview. The respondents were asked the following research questions:

- In what ways and how have the educational conditions of pre-school children changed because of the COVID-19 pandemic?
- What experiences have you gained as a result?

The study took place at the workplace of each participant with only one researcher attending the session and recording the answers. The respondents were informed of the aim and purpose of the study and provided consent to record their answers using a voice recorder. They were informed that their responses could be as long or as short as they liked. To ensure anonymity, the participants were assigned codes U1 to U17 for further analysis and were asked to provide comprehensive answers to the above questions. To allow the respondents to be as explicit as possible, the questions were presented in printed form and they were asked to read, think and share their



opinions on the first question and then move to the following one. The time it took the respondents to answer varied, ranging from 20 to 43 minutes.

## 2.4 Data Analysis

Data analysis consisted of several steps and was conducted using ATLAS.ti8 and SPSS24 for both the qualitative and quantitative approach, applied respectively. In the first steps, all meetings were transcribed for further content analysis. Consequently, the transcribed text was segmented into ideas units (Jacobs & Morita, 2002). An open-coding approach (Emerson et al., 1995) was also used to identify any other issues that might have been addressed, sorting them into topic categories. In the second step, all categories were analysed by running simple descriptive statistics for relative frequencies. To ensure coding reliability, all data was coded by two independent researchers, with the inter-observer agreement being established at 93% for all data sources.

## 3 Results

The analysis revealed four main unit ideas: a) changes in the educational conditions; b) conditions of distance learning; c) experience with distance learning; and d) recommendations. Below, the topic categories are further described along with their relative frequencies.

**a) Changes in the educational conditions** were found in the following areas in particular:

- Form of education
- Distance learning rules
- Availability of digital technology

The **forms** of distance education were diverse; 11.8% of respondents educated children in their kindergartens via mobile radio, 23.5% through Facebook, 23.5% would send materials to parents via email, and 23.5% uploaded educational material on the kindergarten website. Some respondents (23.5%) delivered education assignments personally to the child's parents. 5.9% of respondents mediated educational content through Google, and 17.6% through mobile phone.

In each kindergarten, the **rules** for education were formed according to the currently identified social, economic, and other conditions of the children's parents and the conditions of the kindergarten. According to seven respondents, the person responsible for distance education and the creation of rules for distance education in kindergartens was determined by the principal. Another seven respondents said that the rules were set by the primary school principals, of which the kindergarten was a part. Three respondents said that the rules were set in the kindergarten in collaboration with the teachers and/or by the head teacher.

The rules included the implementation method, i.e., a form of distance education either offline or online. It also included provisions delineating which age groups the distance education was for. Only 41.2% kindergartens prepared educational materials for children with compulsory pre-school attendance, and 58.8% of them prepared educational materials for all age groups. Following this, 23.5% respondents stated that education was voluntary for children, while 58.8% of respondents reported that they had noticed changes in the conditions of education in an addendum to the School Code, and 41.2% of respondents said that they had not noticed any changes in the educational conditions. The rules for the educational conditions set at the beginning of distance education did not have to change for any of the 17 respondents throughout the course of kindergarten closure.

For distance education, the respondents used **digital technology**. The pedagogical staff had not thought about the sufficient availability of digital equipment in kindergartens until the onset of distance education, especially in the last year of pre-school education. In this vein, 10 respondents stated that their kindergarten was sufficiently equipped with this technology for the distance education form they had chosen, and seven reported that their kindergarten was not sufficiently equipped.

The respondents added that the kindergarten heads were not interested in the needs of the kindergarten or whether they were equipped with digital technology to ensure good conditions for distance learning. Only one respondent stated that the kindergarten head was interested in whether the teachers had everything they needed to provide distance education for the children, while 10 respondents plan to equip themselves with digital technology in the future. At the same time, five respondents stated that they needed to be trained in IT skills. In contrast, 12 respondents did not have this need.

b) The respondents also evaluated other areas regarding the **conditions of distance education**, namely:

1. ease, implementation;
2. cooperation with parents;
3. participation of children in education;
4. goals, content of education and their implementation in activities;
5. feedback; and
6. mode of education.

A total of 16 (94.1%) respondents evaluated the ease of distance education as smooth. Only one respondent faced a problem in one socio-economically disadvantaged family that did not have any digital technology at home through which the learning process of their child could be implemented.

According to all respondents, the whole educational process, its effectiveness, and success was primarily dependent on good cooperation with parents. Cooperation with parents was praised by 16 respondents; parents had cooperated to the extent required by them. The same number of respondents reported that parents also expressed satisfaction with the established cooperation with the kindergarten teacher during distance learning. According to one respondent, parents were not satisfied cooperating with the kindergarten teacher and other staff, explaining that there were few misunderstandings, but the parents were very critical. And one respondent complained about the cooperation with parents, commenting that they had absolutely not been interested in their child's distance learning.

Thanks to the close cooperation with parents, the respondents were able to continuously evaluate the children's participation in the activities and the results in their education. In the online format, parents, grandparents, or other authorized individuals were present when using digital technology and became part of the evaluation of the children's activities. Parents brought the completed tasks to the kindergarten in person. This form of transferring learning outcomes was predominant. The evaluation of the tasks completed by the children was sent to the parents via email. The participants reported that they recorded the children's attendance during distance learning, i.e., the age group selected by the kindergarten

at a certain time and attended by the teachers. Non-attendance was monitored, and all 17 respondents required a proper excuse from the children's parents.

All respondents planned the goals and content of the educational activities to meet the educational objectives in all the educational areas as per the RVP PV curriculum and focused on developing all of the children's competencies. They planned and implemented activities aimed at developing children's memory, attention, pre-math, speech, language, motor art and work skills, and logical reasoning, all in the online mode. During distance learning, the respondents (n = 17, 100%) created a lot of educational material that they are going to keep for future use.

During distance learning, the respondents were involved in the evaluation of children's activities and 41.2% respondents indicated that their lessons were observed by the principal during this time. All the respondents expressed that the feedback and the opportunity for peer consultation, in which they verified their planned educational activities and their implementation in the field but also inspired each other, was significant feedback for the distance learning they were implementing.

All respondents also evaluated the offline mode of delivering education as more challenging for both the children and their parents. It was not implemented by 47.1% respondents. This was also because the parents were not prepared for this form of education and were not equipped with digital technology in their homes. Furthermore, the respondents thought about what was more beneficial from their point of view for the children's education. Following this, eight of them said that the best form of education for the child was the offline mode, two of them said that it was face-to-face contact, two thought that a combination of both forms of distance education was the most beneficial, and one said that it was the online form.

c) All respondents commented on the **experience** gained by pedagogical staff through the distance teaching of pre-school children, relating to:

1. process, form of distance learning;
2. difficulty of distance learning;
3. rules and time required for preparation;
4. advantages and disadvantages of distance learning; and

5. recommendations for the future.

Some of the respondents' experiences have already been shared in response to the first part of the question (in what ways and how the educational conditions of pre-school children have changed following the COVID-19 pandemic).

- According to all respondents, the whole process and its effectiveness and success was mainly dependent on good cooperation with parents.
- All respondents evaluated educating children in the offline form as difficult for them and for the parents, and for this reason it was not implemented by 47.1% respondents.
- Another of the respondents' experiences was the awareness of the importance of **rules** for distance learning and their appropriate setting. 47,1% respondents stated that if clear rules are set and these are thoroughly presented and explained to parents, the education process works well.
- The respondents also commented on the time demand when setting up distance learning. They spent 8 to 10 hours preparing classes (35.3% of respondents).
- Based on their experience, 70% respondents expressed only one advantage of distance learning, namely personal improvement in working with digital technology. During distance learning, in one respondent's facility, a Google classroom was created. The respondent stated that the form of distance learning was appropriate, purposeful, and beneficial for everyone involved in this form of education.
- All 17 respondents mostly lacked face-to-face contact with the children.
- Of the respondents, 5.9% also commented on the loss of privacy.

d) Based on their experiences, the respondents also made **recommendations** for distance learning in kindergartens in the future:

- One respondent recommended the establishment of Google classrooms in kindergartens for contact with parents, to link the online and offline educational forms.
- One respondent expressed a recommendation for the Ministry of Education to inform parents about their obligation to cooperate with the kindergarten in distance learning in children with compulsory pre-school

attendance, and to further explain to parents the meaningfulness of this form of education.

- One respondent expressed that it would be appropriate to establish uniform rules for distance learning for all kindergartens.
- One respondent also expressed the request to help socially disadvantaged families with the provision of digital technology for children to be able to participate in distance learning.
- All respondents recommended equipping the kindergartens with digital technology.
- Four respondents requested training for teachers in the skills of working with digital technology, thus broadening their competencies for this form of education.

#### **4 Discussion**

Until now, pre-school children have never been educated through distance learning, and in the modern history of the Czech Republic it has never happened that kindergartens have been closed, even during various (child) epidemics. As a result, kindergartens did not have any time to prepare for or discuss the conditions and forms of implementing distance education for children, nor did they receive any methodological support from the Ministry of Education, like pedagogical staff at other school levels had. Thus, the pedagogical staff had to effectively adapt and organise all the conditions for the new form of distance education and its course in their kindergarten themselves, in compliance with the strict sanitary measures laid down by the Government. In order to understand the changed conditions and gained experiences throughout this unique period, our study investigated and analysed the opinions of 17 pedagogical staff working in kindergartens within the Czech Republic.

As per educational conditions in general, the authors learned that the predominant number of participants used digital technology to present pedagogical content to children. Most teachers used more traditional means of delivery, such as e-mail, mobile phone or website, and only five of them used more current platforms, such as Google or Facebook. With the use of technology, the teachers also addressed the important issue of IT availability. Of the respondents, 41.2% declared that their workplaces were not sufficiently equipped with IT. Digital technology is usually

purchased by kindergartens from their budget for operation allocated by the kindergarten head. Operations vary from one region to another, hence the possibilities for purchasing equipment for possible digital technology do as well. Therefore, kindergarten pedagogical staff were right to feel marginalised in ensuring the conditions and the fulfilment of their new obligations. Furthermore, not all families were sufficiently equipped with IT technology, hence education was mostly delivered in an offline mode.

For any form of education to run smoothly, kindergartens must have a school code in place. Given that distance learning is compulsory for children in the last year of pre-school education, the rules should already be elaborated in the code. It is interesting to note that the rules for distance learning had only been incorporated in the school code in some of the kindergartens and did not have to be changed in the places where they were established. In connection with the call for training teachers in the use of digital technology, the question is whether with the development of digital competencies in teachers in the future there will be a time for a more thorough elaboration of the rules in the school code.

Regarding gained experiences, this situation was beneficial in creating much needed new teaching material and improving the teachers' skills in working with digital technology. The teachers also benefited from observations, discussions, and support from other colleagues. On the other hand, this situation also brought loss of privacy and a lack of social contact. This condition also highlighted an already known fact – education delivered distantly, offline, in most circumstances through non-interactive activities, requires very good cooperation among all educators and parents.

## **5 Limitations**

One of the limitations was the relatively small number of respondents, which, unfortunately, was affected by the quarantine regime. Nevertheless, the small sample size was balanced by the fact that the respondents were from several regions of the country, thus the authors could obtain varied data, as operation is usually region dependent.

## 6 Conclusion

Distance learning in the Czech Republic was ordered for kindergartens by the Ministry of Education quite suddenly, without any possibility for preparation or support. This change was a consequence of the rapid spread of the COVID-19 virus, as well as the measures of the government and the Czech Health Station, which are still in force. This study identified changes in the educational conditions of pre-school children that were reflective of changes in education forms as a result of these measures, and so the results of the study are actionable and possibly ongoing. They addressed specific situations in a range of pre-school settings determined by their location and size, varied organisation of operations and demands from managers, teachers, and parents. The analysis of the responses also provided further information related to distance learning in kindergartens. After the end of the emergency situation following to the coronavirus epidemic, it would be advisable to repeat the study.

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