

Empowering preschool teachers and parents for digital education: Influence of the pandemic on children and preschools

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Abstract— In addition to its impact on daily and work lives, the COVID-19 pandemic has significantly affected education delivery. According to UNESCO, nearly 90% of the world's student population has had their learning experiences disrupted by precautions and policies implemented to overcome the spread of the disease. The project "Home, but not alone: Home, but not alone: Empowering preschool teachers and parents for digital education", a European funded project focused on the exchange of good practices to improve preschool education throughout Europe, will mitigate educational losses by supporting teachers and parents who are the main providers of education for young children. This work describes the actions made to analyse the influence of the pandemic on children and preschools.

Keywords— digital education, ICT, preschool education, SWOT analysis, World Café discussion, exchange of good practices, European project.

I. INTRODUCTION

The international health crisis has triggered unprecedented, extensive and dramatic changes in the lives of children, their families and teachers. Educational losses [1] resulting from lack of face-to-face learning are higher for preschool children since they are not developed enough to work and learn independently. According to UNESCO, nearly 90% of the world's student population has had their learning experiences disrupted by

precautions and policies implemented to overcome the spread of the disease [2]. Therefore, they are estimated to be one of the most affected groups due to the pandemic [3].

During the lockdowns throughout Europe, the need for digitising school education emerged. Many children had to stay home and were deprived of stimuli which are instrumental for their academic, psychological and social well-being.

The pandemic situation has once again shown that digital competence [4] is a permanent necessity. It is important to develop this competence at an early stage [5]. Extensive research has shown that early years have great effects on children, with lasting personal and societal consequences. For this, it is essential to have high-quality early childhood education and care systems with well-qualified staff with initial and continuing training that enable them to fulfil their professional role.

There is a wide range of solutions considering the problems presented, from the continuous training of teachers through the improvement of digital skills, to greater support for families both in the development of their digital skills and the knowledge necessary for academic, psychological or social development of their children.

In this sense, the project “Home, but not alone: Empowering preschool teachers and parents for digital education” (Table 2) will mitigate educational losses by supporting teachers and parents, who are the main providers of education for young children, focusing on digital tools and teacher-parents relationships.

TABLE I. PROJECT DETAILS

Title	Home, but not alone: Empowering preschool teachers and parents for digital education
Acronym	HBNA
Funding Entity	European Union
Call	Erasmus + KA2 - Cooperation for innovation and the exchange of good practices. Partnerships for Digital Education Readiness
Reference	2020-1-TR01-KA226-SCH-098133
Project leader	Emel Simsek
Coordinator	Kecioren Ilce Milli Egitim Mudurlugu (Turkey)
Partners	Kecioren Ilce Milli Egitim Mudurlugu University of Salamanca Anadolu University GO! Scholengroep Brussels STEP JOUUDG Breshia Kalaba Pre-primary School GO! basisschool De Telescoop Pre-Primary School
Budget	128.736,00 €
Start date	01/06/2021
End date	31/05/2023
Web	https://grial.usal.es/hbna

Under the project, a training of teachers involved called "Exchanging good practices" has been developed with the following objectives:

- To exchange good practices of partner preschools
- To co-design the methodology and scope of the interactive eBook on good practices and MOOC.
- To discuss the effects of the pandemic on education, especially on preschool education.
- To train the teachers for more efficient and meaningful use of ICT in their practice.
- To foster the exchange of ideas and experience between academicians/experts in preschool education and preschool teachers.

The objective of this work is to present one of the activities carried out in the Teacher Training, the “World Café discussion” focuses on the influence of the pandemic on children and

preschools. The result of the analysis is the input for the main results of the project explained in the next section.

This work is set out in 5 sections. The second section describes the project. The third section presents the methodology used in the study. The fourth section describes the main results of the study. Finally, the last section summarises the main conclusions.

II. THE PROJECT

A. The objectives

The project addresses crucial needs of partnered preschool institutions with professional help from universities and commits to providing hands-on experience for the educators.

In this regard, the project has the following objectives:

- Support teachers of pupils aged 3-6 years by developing their ICT skills at least by 25% and providing resources.
- Improve preschool teachers’ capacity to supplement education at home by increasing the number (at least %30) and quality of pedagogical activities involving parents.
- Increase the variety of practices for preschools by 35% through promoting the exchange of good practices.

B. The main results

The project aims to achieve the objectives with the following tangible results:

- Interactive eBook of good practices in preschool education. The contents will be collected from partner organisations and associated partners. This free and open online educational resource will enable preschool teachers to share and incorporate online resources into their own teaching.
- A massive open online course (MOOC [6], [7]) to train preschool teachers to develop their digital competencies and soft digital skills. The content will be specifically designed for preschool education and include modules such as technology-supported pedagogies, online content creation tools, and game-based/gamified instructional designs. The course will be piloted in partner preschools.
- A project website, social media accounts, a logo and an eTwinning project to disseminate and share the results with interested target groups.

C. The consortium

The Project is coordinated by the Keçiören İl Milli Eğitim Müdürlüğü (<https://kecioren.meb.gov.tr>). It is a legal authority responsible for the educational issues in the region headed by the Ministry of National Education.

The consortium is completed by the participation of seven European institutions with significant experience in the education sector, skills development:

- The University of Salamanca (USAL) is represented by the GRIAL Research Group, a multidisciplinary research

group that arises around the creation and application of educational technology [8].

- Anadolu University, the leading university for online distance education in Turkey.
- Counseling Centre STEP, is a private institution providing psychological and special-educational services. It is also an educational facility with the Ministry of Education, Youth and Sports.
- GO! Scholengroep Brussels, one of the 26 major school groups of the Flemish Community Education system (GO!). SG supports all of our (over 60) schools in Brussels in administrative, financial, infrastructural and human resource matters.
- JOUDG Breshia, an educational institution with a capacity of 350 children in kindergarten with a capacity of 150 children's located in the second region of Debar.
- Kalaba Pre-primary School, a public preschool founded in 2011 and located in Ankara. It is in a central location in the town centre. They have around 250 students.
- GO! basisschool De Telescoop Pre-Primary School, is one of the 38 preschools from Scholengroep Brussel. They follow Freinet methodology.

Furthermore, the consortium is completed with more than 50 associated partners that do not receive funding for participating in the project but played an essential role in the need analysis conducted in all schools during the project design. These institutions are:

- +11 more state preschools in district of Keçiören (Turkey)
- +2 associated preschools of MK preschool (North Macedonia)
- +38 preschools in Go! School Group Brussels (Belgium)

III. METHODOLOGY

The “World Café” discussion [9] is a structured way of creating a network of conversation around key issues. It follows a creative process methodology that leads to a form of collaborative dialogue in which knowledge is shared.

Three roundtables were created around the topic on the influence of the pandemic on children and preschools for the development of the discussion [10]:

- Roundtable 1: How the pandemic has influenced the management of the school?
- Roundtable 2: How has the pandemic influenced the classroom by the teachers’ point of view?
- Roundtable 3: How has the pandemic influenced the school through the parents’ point of view?

The general procedure for the development of the discussions was:

- The total duration of the activity was two hours.

- There were three groups of six people in each (at least one person per partner organisation in each group involving people from different countries and with different perspectives due to their work experience).
- Each table had questions to guide the discussions, following a SWOT analysis:
 - What do you do well? - Strengths
 - What are your goals? - Opportunities
 - What do you need to improve? - Weakness
 - What obstacles do you face? – Threats
- At each roundtable, there was a moderator who could guide the debate following the proposed questions or add new ones to add new topics to the discussion.
- All participants were expected to contribute to the discussions at all tables.
- The rotation of changing tables took place every thirty minutes.
- At the end, each moderator had ten minutes to share the main conclusions of the SWOT analysis for their table.

IV. RESULTS

The following sections cover the main results of each roundtable.

A. Roundtable 1: How has the pandemic influenced the management of the school?

This roundtable discussed how the pandemic influenced the management of schools, starting with the strengths and weaknesses to analyse opportunities and threats.

In terms of strengths, the groups highlighted the good qualification and management in the school, with a quick organisation for classroom management, searching for new funding, existing and getting new technological equipment, new spaces, increasing the hygiene in the schools and greater teamwork. It is worth mentioning that the pandemic positively influenced the reputation of teachers, which in some countries was low, and the importance of preschool teachers was reinforced.

Regarding weaknesses, the management in some institutions led to teachers being overstretched, the time taken to talk to parents was not regulated, priorities had to be chosen, with constant changes in management to adapt to needs resulting in an overload of work for teachers and managers in schools. Finally, it is important to mention that at these educational levels the dependence on parents was excessive, sometimes hindering the learning process and also proving the influence of the lack of digital competences in families.

The main opportunities highlighted in the discussion on the management carried out were the definition of the necessary competences of the teaching staff, reinforcement of the teachers' profiles, increased technology in the classrooms, more online versions of the tools, the involvement of parents with more information on the educational process of their children and

above all the need for constant improvement and the importance of digitalisation from an early age.

In terms of the obstacles facing school management, the main topics discussed were the lack of communication between educational levels, the parents' complaints directly to the professors and the lack of equal opportunities for low-income families.

Figure 1 shows the summary of the comments made by the different groups in the SWOT analysis and the moderation of the first roundtable.

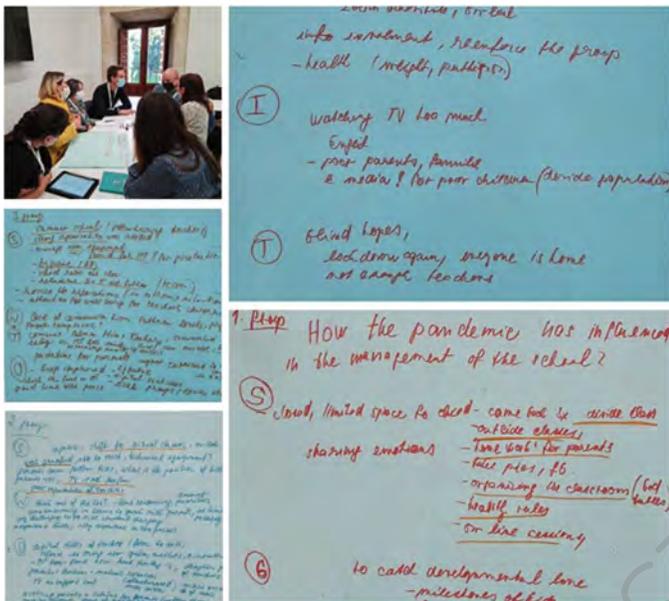


Fig. 1. Group discussion about the pandemic influence on the management of the schools

B. Roundtable 2: How has the pandemic influenced the classroom by the teachers' point of view?

In terms of strengths, the most mentioned topic has been the use of ICT tools, but in the same way, it was also a threat due to the lack of digital competences in the teachers. Mainly, the strengths are the increased flexibility in the classroom, the adaptation to new technologies and situations, the love of children, psychological support in some countries, creative ICT tools and the teachers' guide the children and parents in ICT.

Regarding weakness detected from the teachers' perspective, the main topic was that after returning in school some social problems were detected in children- Other problems detected was the lack of control, budget problems for material, behaviour problems and the self-care was damaged.

Concerning threats can be summarised as follow: Losing children in the classroom during the online teaching due to digital issues (like internet problems and not electronic devices available) and in presence due to parent's fear of COVID-19; some teachers must learn new ICT competences and must develop their emotional skills; difficulty in keeping distance; using mask cannot read the facial expressions and this result in a lack of interaction.

Teachers mentioned the development of ICT skills, the use of different technologies applied in teaching, tools for pedagogical support, new knowledge for children, teachers and parents, as main opportunities detected in the classroom.

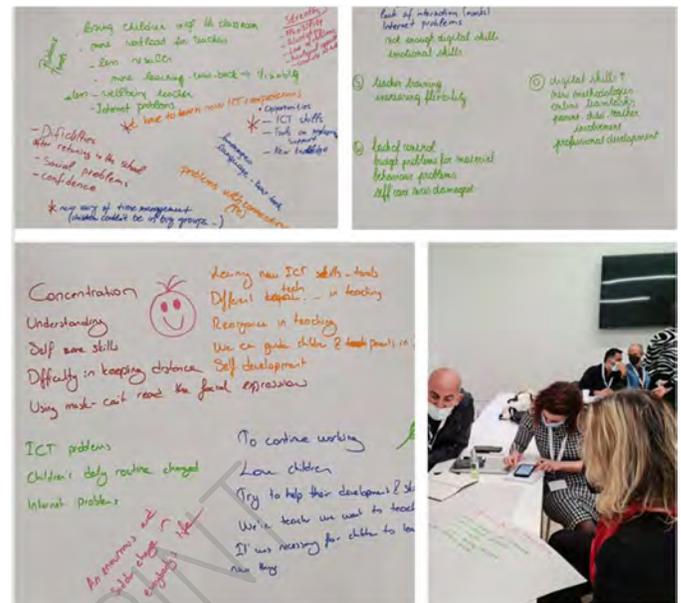


Fig. 2. Group discussion about the pandemic influence in the classroom from the teacher perspective

C. Roundtable 3: How has the pandemic influenced the school through the parents' point of view?

Summarising the third topic about the parents perspective of the pandemic influence at schools, regarding strengths detected were: spending more time in family, the development of empathy/respect for the teacher, improvement of the parents digital skills.

If we focus on the weakness detected in all the groups, they mention the time management in different ways: not all parents could manage the task of the children at home, time management with the computers available at home or children had to spend long time on the screens. Another weak detected was the lack of ICT skills, methodology and tools for teaching.

As opportunities, an improvement in the relationship and communication with parents was detected, parents became more aware of their children's education and also improved their digital skills.

Finally, the obstacles detected were that parents' health problems affected the children, parents' fears negatively affected many children, there is much social inequality not being able to contact some parents, and some children lost the existing structure in the school.

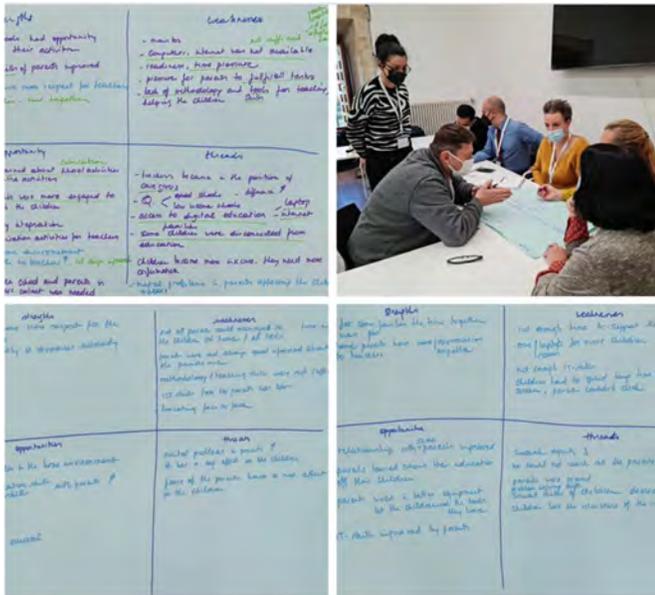


Fig. 3. Group discussion about the pandemic influence in the classroom from the parents perspective

V. DISCUSSION AND CONCLUSIONS

The main conclusions of the World Café discussion are that the importance of continuous training and good communication between all levels and actors in children's education is essential. The exchange of experiences and opinions in each debate has built the next steps to be taken in each of the participating schools to improve at the different levels of management, teachers and parents.

What words represents your main learnings?



Fig. 4. Word cloud summarising the main conclusions about the "World Café" discussion

The "Word café" was very enriching in terms of the approach necessary for the development of the strategies to be followed in

the creation of the main results of the project: the eBook of Good practices and the MOOC to train the preschool teachers in digital competences.

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