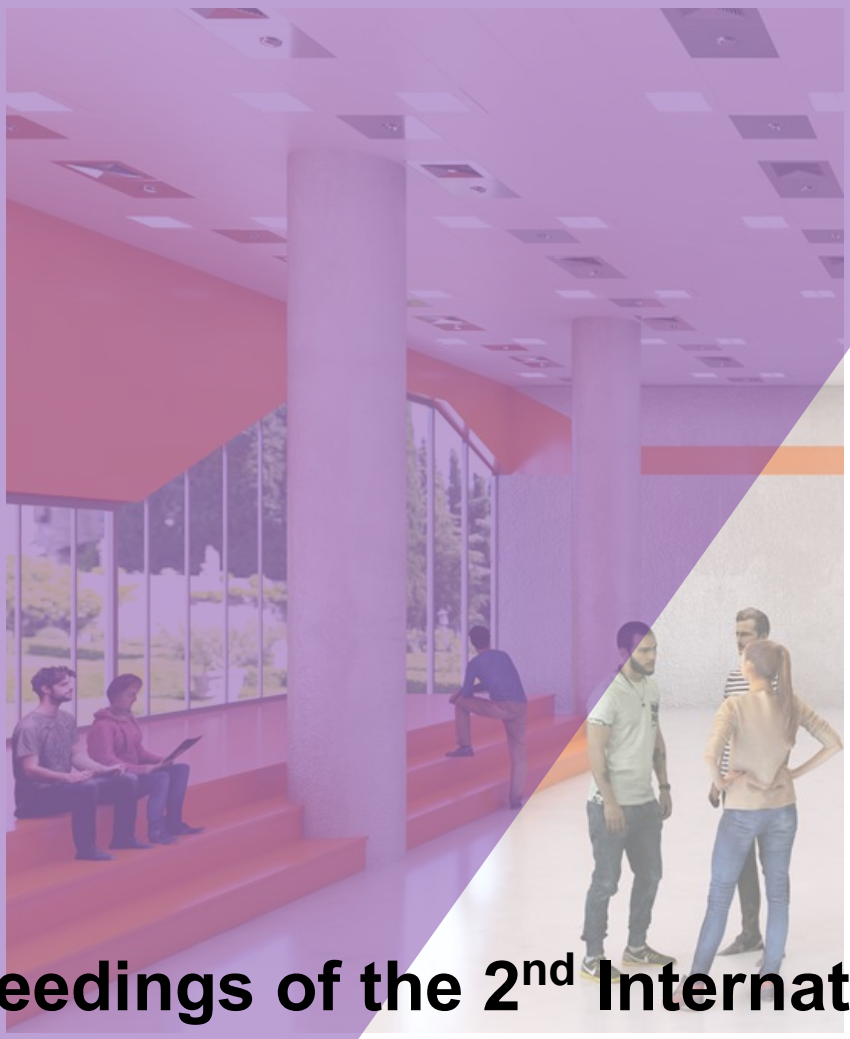

Proceedings of the 2nd International Conference of the Journal Scuola Democratica

REINVENTING EDUCATION

VOLUME III

Pandemic and Post-Pandemic Space and Time

ASSOCIAZIONE "PER SCUOLA DEMOCRATICA"

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Distance Learning at Emilia-Romagna's Schools. A First In-Depth Quantitative and Qualitative Analysis from the Teachers' Perspective

Andrea Ciani, Chiara Dalledonne Vandini, Aurora Ricci and **Lucia Scipione**
Alma Mater Studiorum – Università di Bologna, andrea.cini@unibo.it
Alma Mater Studiorum – Università di Bologna, chiara.dalledonne2@unibo.it
Alma Mater Studiorum – Università di Bologna, aurora.ricci@unibo.it
Università di Modena and Reggio Emili, lucia.scipione@unimore.it

ABSTRACT: *The outbreak of the COVID-19 pandemic has seen some of its most disruptive effects on schools. Indeed, due to closed schools, an estimated 74 days of learning lost worldwide per student have been estimated (Save the Children, 2021). UNESCO, UNICEF and World Bank (2020) calculated that the loss of one-third of a school year in terms of cognitive skills losses could reduce the future student's earned income by 3% and a country's GDP by 1,5% for the rest of the century. This dramatic scenario could be exacerbated by the impact of the losses in social-emotional development and the pre-existence of disadvantaged conditions relating pupils. According to this, the present work aims to represent a first in-depth quantitative and qualitative analysis of the SIRD national survey regarding the target of 3.423 Emilia-Romagna teachers of all school grades, who filled the questionnaire between April and June 2020. In particular, the role of several didactic, organizational, and relational variables that influence the percentage of students not reached by DAD and the percentage of 'missing' students (i.e., those not completely reached) was explored. Quantitative analyses were conducted for different school grades to describe the difficulties perceived, the collaboration perceived, the teaching strategies perceived and the evaluation for technical, organizational, and didactic issues by teachers. Furthermore, an explorative analysis was performed to identify the factors affecting the early school leaving. Qualitative analysis were conducted to investigate more deeply the experience of teachers in emergency teaching, and in particular they were asked to indicate the difficulties of students in the use of DAD, the strengths and weaknesses of remote education. To study the open-ended responses, an analysis model including macro-categories and sub-categories (Batini et al., 2020) was created, capable of restoring the complexity of perceptions and experiences of teachers belonging to different school grades. The quantitative findings highlight the role of both the perception of technological tools' availability by students' families and the perception of having included all students, in predicting the perception of early school leaving. In terms of differences within school grades, the effect of some variables appeared stronger: the difficulties regarding pupils' parents (kindergarten); the difficulties regarding colleagues and school managers (primary school); the perception of technological tools' availability by students' families (secondary school); and the difficulties regarding DAD (high school). At the same time, the qualitative results explore the difficulties in the use of DAD going beyond both the 'problems related to technological tools' and the 'lack of*

direct contact'. In particular, the difficulties in planning and achievement of objectives due to age inadequacy in the use of the tool (0-6 ECEC), the difficulties related to the quality of communicative exchange, interaction and feedback (primary), the trouble in evaluative processes and in the control and monitoring of students (secondary school). First reflections will be carried out in the light of probable risk scenarios linked to school dispersion and to the general impoverishment of competencies to which the current target students involved in the emergency distance teaching and learning process are severely exposed.

KEYWORDS: *COVID-19, Distance learning, Teachers, Lockdown.*

Introduction

Since 5 March 2020, the health emergency caused by the COVID-19 pandemic has required Italian education to switch from traditional face-to-face learning to distance learning (DL) without having enjoyed previously explored and tested pathways or procedures. Due to the closure of schools during the first phase of the COVID-19 pandemic emergency, a loss of 74 days of learning per student has been estimated worldwide (Save the Children, 2021). In parallel, UNESCO, UNICEF, and World Bank (2020) calculated that the loss of one-third of a school year in terms of cognitive skills losses could reduce the future student's earned income by 3% and a country's GDP by 1,5% for the rest of the century. According to this, it has been estimated that students already at risk of social exclusion could be further disadvantaged and increased invulnerability by the impact of losses in socio-emotional development (Bayrakdar, Guveli, 2020; Haeck, Lefebvre, 2020).

The present study is part of a broader SIRD National Survey that involved a target of more than 16.000 school teachers in the national territory and developed its data collection between April and June 2020 through an online questionnaire, promoted in collaboration with the Teachers' Associations. Regarding this, the survey represented an opportunity to re-establish a strong alliance between teachers and researchers in schools and students' interests through a discussion of educational practices. Moreover, the national survey aimed to investigate/identify the teaching, organizational and relational variables (independent variables) that, during the period of the first national health emergency (March-June 2020), influenced the perception of teachers (dependent variable) of each school grade. In this regard, several quantitative (Lucisano, 2020; Lucisano *et al.,* 2021; Ciani, Ricci, 2020; 2021a; 2021b) and qualitative (Lucisano *et al.,* 2020; Batini *et al.,* 2021; Dalledonne, Scipione, 2021) analysis results have already been published.

Therefore, the objective of the present work is to represent a first in-depth quantitative and qualitative analysis of the SIRD national survey regarding the target of 3.423 Emilia-Romagna teachers of all school

grades. In particular, the role of several didactic, organizational, and relational variables that influence the percentage of students not reached by distance learning and the percentage of 'missing' students (i.e., those not completely reached) was explored.

1. Method

The methodological framework consists of a mixed-method (Creswell, Plano Clark, 2011; Ponce, Pagán-Maldonado, 2015) having a parallel research design (Trinchero, Robasto, 2019). Regarding data collection, it was carrying out through relations between university teachers of pedagogical areas and schools. In particular, the data collected in Emilia Romagna are impressive, and it represents the 6% of the Emilia-Romagna teachers. The job roles' distribution into the sample consists of 45% primary school's teachers, from the other side, 23% first degree of secondary school teachers, 18% kindergarten teachers, and 13% second degree of secondary school. The 68% of the sample is between 35 and 55 years old.

The online self-administered questionnaire was composed of 122 items, including six open-ended questions; the open-ended questions allow to hear the teachers' voices and understand how they have been through this experience. Concerning the quantitative sub-study, the dependent variable is represented by the percentage of perceived 'missing' students; in order to measure it, it has asked teachers, on the one hand, to estimate the percentage of students not reached by distance learning and, on the other hand, to estimate the percentage of students partially reached. To calculate the 'missing' student percentage, it has correlated these percentages with the data concerning the student population in Emilia-Romagna and then transformed them into estimated absolute values. Finally, the independent variables are represented by difficulties perceived, collaboration perceived, teaching strategies perceived, and factors affecting early school leaving like the inclusion of all students perceived, availability of technological tools by students' families. The teachers answered using a 5-level ad-hoc Likert scale (1=Not at all; 5=Very much) to quantify the perception of different constructs.

Concerning the qualitative sub-study, it focused on exploring the teachers' perception of pupils' difficulties in using distance learning. The qualitative categorization process included five phases elaborated and adapted from the work of Braun and Clark (2006): familiarization with the data, definition of criteria for category modelling, organization of categories and sub-categories, review, and calculation of occurrences and interpretation.

Descriptive statistics were conducted for different school grades to describe the difficulties perceived, the collaboration perceived, the teaching strategies perceived, and the evaluation for technical, organizational, and didactic issues by teachers. In addition, an explorative

analysis was performed to identify the factors affecting early school leaving. From the other side, the qualitative analysis model, including macro-categories and sub-categories (Batini *et al.,* 2020; 2021) was designed to restore the complexity of perceptions and experiences of teachers belonging to different school grades.

2. Quantitative analysis results

2.1. Teaching strategies

The descriptive analyses start with a focus on the teaching strategies used by teachers of all levels in distance learning. As shown in Table 1, in the Emilia-Romagna region, the teachers often resorted to modes of reasoned transmission of material (4,33). This choice, considered to be the most frequent, represents the initial difficulties in implementing DL.

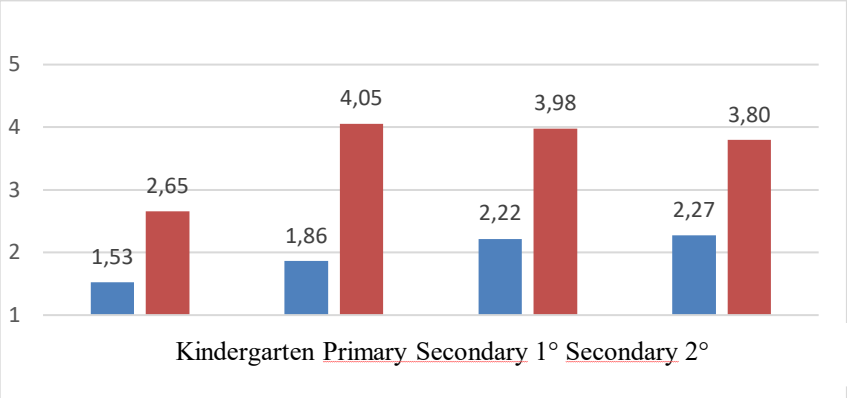
TAB 1. Teaching strategies applied during the DL.

	Total
Reasoned transmission of materials (accompanied by specific indications)	4,33
Intervention after explanation (clarification, restitution)	3,83
In-person explanations (video lessons)	3,78
Written explanations of the materials provided	3,70
Homework and individual study	3,58
Delayed recorded explanations (audio or video)	3,46
Textbooks	3,39
Presentations of individual work by students or groups	2,09
Virtual workshops	1,90
Synchronous collective discussion (in presence)	1,84
Unstructured group work	1,78
Flipped classroom	1,77
Presentation of group work by students	1,65

The first seven teaching strategies most used by teachers during the first lockdown period through distance learning are characterized, with different nuances, by a traditional teaching mode, quite similar to the more frontal models of face-to-face teaching. In this perspective, the teacher defines the assignments and presents them to the students without any particular interaction either with them or among the students. The student is, in fact, asked to receive the assignments and carry them out in a type of work that is distinguished as an individual. Needless to say, at the time of the emergency, the reintroduction of the teaching model used up to that moment (probably the traditional one)

was the safe haven for many teachers. In general, active and interactive teaching strategies were particularly limited in all school grades, while more transmissive teaching strategies, requiring individual student work, maintained high average values (see Figure 1).

FIG 1. *Average Indices of Teaching Strategies applied during the DL (1=not at all; 5=very much).*



2.2. The collaboration

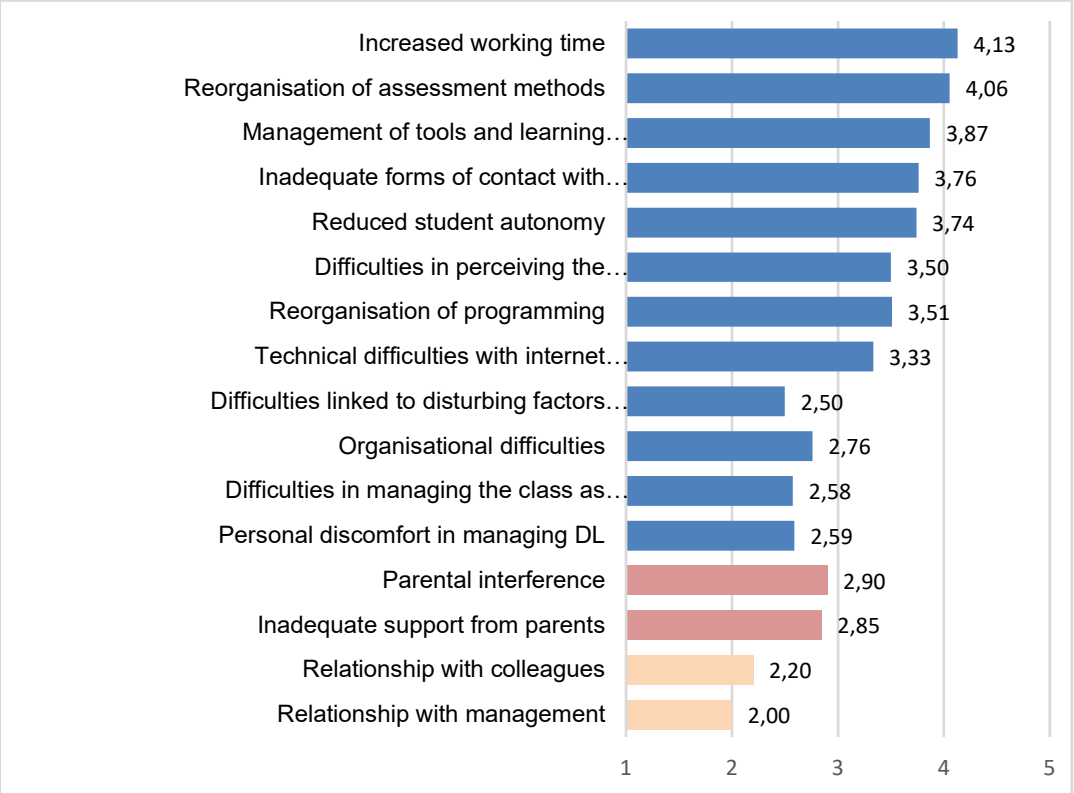
Overall, the collaboration from which teachers in Emilia-Romagna (3,33) were able to benefit was greater (t= 8,35, p<.001) than in the other Regions (3,10) from several points of view. They were able to rely partly on the organizational and management structure of the school and its referents (2,84; t= 4,72, p<.001), and even more on the help of parents (3,06; t=6,19, p<.001) and class teacher colleagues (3,78; t= 7,96, p<.001). Across the different school grades, the highest cooperation index is always that of fellow section teachers in pre-school (3,90).

2.3. Difficulties

There was no shortage of critical factors affecting different areas: from the time management and tools to relational aspects and didactic-assessment issues (Figure 2). From the management point of view, there was an increase in working time (4,13) and the management of a new learning environment such as the DL (3,87). The extension of time probably required a further effort of programmatic remodelling (3,51). On the didactic-assessment side, the second most critical issue is reorganizing assessment methods (4,06). Proposing open or semi-structured written tests and reconfiguring them for online administration was probably tricky. The difficulty in perceiving the participation of individual students (3,50) was less reported but still relevant from an educational point of view. If we add to this more didactic criticality concerning the technical difficulties of students' connection (3,33), a worrying picture emerges on the equity and school drop-out side. On the other hand, as far as relational criticalities are concerned, as imagined from the results of the collaboration indexes, relations between colleagues and parents were not hindering. On the contrary, inadequate

forms of contact activated by students (3,76) and much fewer difficulties in managing the class as a whole (2,58) were found.

FIG 2. *Teachers' difficulties during the implementation of DL (1=not at all; 5=very much).*



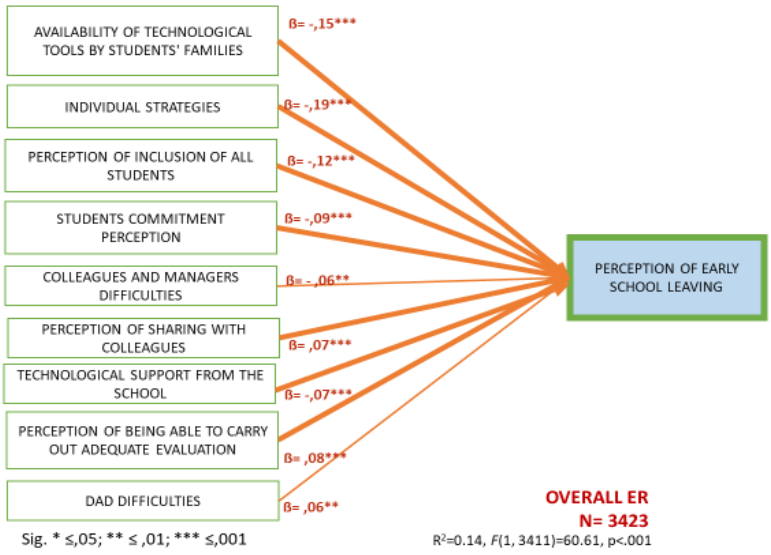
2.4. Explorative regression analysis

Using exploratory regression analysis, it was possible to identify protective and counterproductive factors influencing early school leaving. According to the perceptions of teachers from Romagna in all school grades, the contrasting factors that acted significantly against early school leaving were mainly (see Figure 3):

- the availability of technological tools for DL (β= -,15; p<.001);
- the use of transmissive teaching strategies, which represented a reassuring and easy-to-manage continuity; (β= -,19; p<.001);
- the perception of including all students (probably also corresponding to the teachers' wishes, β= -,12; p<.001).

A protective resource and, therefore, one that favored school drop-out was the perception of using appropriate assessment (evidently intended as summative or as strategies for behavioral control of the class). There are different and interesting nuances concerning protective and counteracting factors against early school leaving at different school levels, but the availability of technological tools remains the most important and constant factor. This underlines the importance of supportive policies.

FIG. 3. *Protective and counteracting factors influencing early school leaving.*



3. Qualitative analysis results

Qualitative analysis was conducted to investigate more deeply the experience of teachers in emergency teaching, and in particular they were asked to indicate the difficulties of students in the use of Distance Education, the strengths and weaknesses of remote education. Open-ended questions allow us to hear the teachers' voices, their reflections, and understand how they have been through this experience. Among the questions posed to teachers regarding distance learning, here we will present the data regarding the question on students' difficulties (open Question n. 1) because it seems the most appropriate and in line with quantitative research. The interest in this question stems from the fact that it tells us what external factors have influenced students' access/participation in distance learning.

3.1. Distribution of categories by school grades

In Table 2 we can observe the distribution of the categories with regard to the question 'indicate what difficulties the students had in the fruition of DL' based on the distinction of school grade. The categorical model has 9 macro-categories and 38 sub-categories for this question.

The teachers, of all school levels, agree in recognizing as a limitation to the use of the DL problems due to poor or absent technological tools (in the availability of devices, in the limitations due to the internet connection). This finding is also confirmed by an initial exploration of the research findings on the qualitative analysis of the national sample where the percentage of occurrence of this category is 40% of total occurrences (Batini *et al.,* 2021). In this data technological difficulties are followed by student attitudes toward DL, issues related to poor collaboration, inclusion, and issues related to life contexts. To enrich the framework of

the data and open interesting avenues for discussion, we will attempt here to return the distribution of categories for each school grade, relative to the sample of teachers in the region.

TAB. 2. *Distribution of categories by school grades*

	ECEC %	PRIMARY %	SEC. 1° %	SEC. 2° %
Issues related to technological tools	23,6	36,0	41,3	46,2
Issues related to computer skills	3,6	9,4	6,8	3,0
Issues related to life contexts	13,2	10,5	6,3	7,3
Problems related to the lack of social relations/interaction	2,2	1,2	0,6	0,5
Issues related to lack of or limited cooperation	18,2	13,2	9,2	2,5
Issues related to the new learning environment	11,5	4,3	1,8	2,0
Student attitudes toward distance learning	6,9	7,6	18,9	22,5
Inclusion/ special educational needs	10,1	12,3	12,3	9,4
Other answers	10,5	5,4	2,8	6,6

Regarding preschool and primary school teachers, it seems to be perceived as a fairly relevant the Issues related to the lack of/or limited cooperation that means a lack of collaboration with family. Followed by the occurrences of the categories, it appears that for teachers of pre-school a non-negligible difficulty is the Issue related to the life context (13,2%), a fact that, although in smaller percentage, is not negligible even in other groups of respondents. For primary school teachers, however, the critical Issues of inclusion and special educational needs are more relevant (12,3%).

The technological skills of the actors involved (students, parents and teachers) do not seem to have been decisive in the early childhood (3.6%) and in the second-level secondary school (3%), while they were more reported by teachers in primary (9.4%) and first-level secondary school (6.4%). Interesting is the reporting of critical points in the computer skills of parents, although minimal, almost exclusively by primary school teachers (3.5%). In secondary school, however, it is the attitudes of students towards DL that are among the main reasons for difficulties in its use (in both levels, 18,9% in the first-level and 22,2% in the second-level): the teachers report a lack of participation, a lack of attention and commitment, but also a lack of motivation in teaching activities in which students were perceived as little interested or selectively interested only in some content or some subjects.

Focusing attention on the overall data (Tab. 3), it is possible to note that early childhood appears to be a sample apart, the difficulties having a strong connection with the family reality and the availability of resources (material and otherwise), in relation to the young age of the children and their need for support in making use of DL. Second-level

secondary school teachers differ from the regular trend of the other school grades in giving less weight to the dynamics of cooperation with the family. In primary school it is possible to note as data that differs from the others that related to the technological skills of the actors involved that seem to have influenced the processes of use of the DL. Finally, within this general overview, the data of the first-level secondary school that differs most from the others is recorded in the answer 'other answers': they are the lowest percentage of teachers who said they did not have difficulties.

3.2. Distribution of the emerging subcategories

In an attempt to give back the complexity of the experience of distance learning lived by teachers in Emilia-Romagna, we believe it is useful to bring attention also to the subcategories that have had a higher frequency within the corpus of data. This is because, while the categories give us a general overview of what were the students' difficulties in using distance learning, the most frequent subcategories allow us to grasp what are those contextual, educational, personal dimensions that have most influenced the students' learning process.

Even in the case of the subcategories, it is possible to note some percentage differences based on school grade (Tab. 3). If we refer to the problems linked to the reorganization of the family nucleus, we notice that the percentage in ECEC (12.1%) is double that of secondary school (5.2% and 5.4%), succeeding in grasping how important the role of the family has been especially for younger and less autonomous children. This tendency is confirmed also in another sub-category relative to the lack of family support and collaboration that was perceived as problematic above all in ECEC (18.2%) and in primary (13.2%) compared to upper secondary education where the percentage drops to 2.5%. The differences between ECEC and upper secondary education are also evident in the subcategory related to the inadequacy of the virtual learning environment for the different age groups (early childhood 9.9% while in secondary the percentage is 0). This first analysis tells us that one of the problems most perceived by the teachers was precisely linked to the age of the children and to the fact that the lack of autonomy in the management of the learning tools represented a potential obstacle to the learning processes. Interesting is the reporting of critical points in the computer skills of parents, although minimal, almost exclusively by primary school teachers (3.5%).

Finally, it is interesting to note that a good overall percentage of teachers have not encountered any particular difficulties, and that this percentage is higher in early childhood (7%).

TAB. 3. *Distribution of emerging subcategories*

	ECEC %	PRIMARY %	SEC. 1° %	SEC. 2° %
Problems and reorganization of the family nucleus/work-family reconciliation	12,1	9,0	5,2	5,4
Lack of family support and collaboration	**18,2**	**13,2**	9,2	2,5
Inadequate environment for age ranges	9,9	2,5	0	0
Students' participation, attention and commitment	2,4	2,9	**7,5**	**7,7**
Students' motivation, interest, and selective interest	2,6	0	**5,5**	**7,7**
No difficulties encountered	7,0	4,5	2,2	5,2

Conclusion

The quantitative and qualitative survey carried out has offered some important reflections, but with respect to some themes, it seems that more in-depth study is needed to better interpret and bring out the specifics that characterize individual situations. Reflecting overall on the results of the research, the element that appears in the foreground is how there is no univocal experience of DL. The conditions of redesign, as well as the students' difficulties, change both in relation to the school grade and to the different educational realities and personal experience of each teacher. What emerges from the analysis of the data is that the possibility of fostering the participation of all students, of supporting learning, of collaborating and evaluating effectively do not depend, however, only on the availability of technological means but also on the vision of school that each teacher possesses. In this regard, the focus on the region of Emilia-Romagna was intended to offer a picture at the local level, paying attention to the different orders of school.

As far as quantitative data is concerned, it emerged that the contrasting factors that acted significantly against early school leaving were mainly at different school levels, but the availability of technological tools remains the most important and constant factor.

At the qualitative level, going beyond both the problems related to technological tools and the lack of direct contact, the difficulties of attending DL encountered by students were mainly related to the school levels.

Finally, it emerged that the questionnaire offered some hints that need to be further investigated in order to enhance the experience and the 'voice' of the teachers.

In order to enrich the reflection in the light of probable risk scenarios linked to school dispersion and to the general impoverishment of competencies, will be desirable to cross-reference qualitative and quantitative data which allow us to understand what has been a limitation to the use by students and what instead teachers have perceived as an

intrinsic difficulty of the DL. First, incorporate the data that emerged from the 'student difficulties' with the data of 'weaknesses of DL' discussed in light of quantitative data on risk factors. Second, return the data that emerged from the 'strengths of DL' reread in light of what emerged as the protective factors with respect to school dropout.

Therefore, further research and training initiatives could be a valid support to the activation of reflective processes that support professional development starting from a reinterpretation of the educational and didactic experience lived in the period of distance learning.

In the light of what has emerged, we believe it is useful to support a reflection that does not focus only on the level of teaching technologies, but that is able to offer opportunities to support and sustain the professional development of teachers in order to deal consciously and effectively with the 'future normality' of teaching in presence.

References

Batini, F., Barbisoni, G., Pera, E., Toti, G., Sposetti, P., Szpunar, G., Gabrielli, S., Stanzione, I., Dalledonne Vandini, C., Montefusco, C., Santonicola, M., Vegliante, R., Morini, A., Scipione, L. (2020). «Un modello di analisi delle domande aperte nell'indagine nazionale SIRD sulla didattica a distanza durante l'emergenza COVID-19», *RicercAzione*, 12 (2), 47-71.

Batini, F., Sposetti, P., Szpunar, G. (2021). «La parola alle e agli insegnanti. Prima analisi di categorie and sottocategorie delle risposte qualitative al questionario SIRD», In AA.VV. (eds) *La DL in emergenza: vissuti e valutazioni degli insegnanti italiani. Scelte metodologiche e primi risultati nazionali,* Lecce, Pensa Multimedia. pp. 100-156

Bayrakdar, S., Guveli, A. (2020). «Inequalities in home learning and schools' provision of distance teaching during school closure of COVID-19 lockdown in the UK», *ISER Working Paper Series*, 09.

Braun, V., Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3 (2), 77-101.

Ciani, A., and Ricci, A. (2020). *La Didattica a Distanza nella scuola in emergenza* (SIRD Working Paper). Bologna. SIRD.

Ciani, A., Ricci, A. (2021a). *La Didattica a Distanza e la scuola che non lascia indietro nessuno. Prime analisi di regressione*. In AA.VV. (eds), *La DL in emergenza: vissuti e valutazioni degli insegnanti italiani Scelte metodologiche e primi risultati nazionali*, Lecce, Pensa Multimedia, pp. 73-99.

Ciani, A., Ricci, A. (2021b). «La didattica a distanza nella scuola in emergenza. Uno sguardo quantitativo sui/lle docenti dell'Emilia-Romagna», in P. Lucisano, P. (ed) *Ricerca e didattica per promuovere intelligenza comprensione e partecipazione*. Lecce, Pensa MultiMedia.

Creswell, J.W., Plano Clark, V.L. (2011). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, California, SAGE Publications.

Dalledonne Vandini, C., Scipione, L. (2021). «Commenti e riflessioni sulla DL nel questionario SIRD: studio esplorativo dei dati dell'Emilia-Romagna», in P. Lucisano, P. (ed) *Ricerca e didattica per promuovere intelligenza comprensione e partecipazione*. Lecce, Pensa MultiMedia.

Haeck, C., Lefebvre, P. (2020). *Pandemic school closures may increase inequality in test scores*. Working Paper, 20-03.

Lucisano, P., Girelli, C., Bevilacqua, A., Virdia, S. (2020). «Didattica in emergenza durante la pandemia COVID-19. Uno sguardo all'esperienza locale e nazionale degli insegnanti», *Ricercazione*, 12 (2), 163-86.

Lucisano, P., De Luca, A. M., Zanazzi, S. (2021). «Le risposte degli insegnanti all'emergenza COVID-19», in AA.VV. (eds) *La DL in emergenza: vissuti e valutazioni degli insegnanti italiani Scelte metodologiche e primi risultati nazionali*, Lecce, Pensa Multimedia. pp. 13-51

Ponce, O.A., Pagan-Maldonado, N. (2015). «Mixed Methods Research in Education: Capturing the Complexity of Profession International», *Journal of Educational Excellence*, 1 (1), 111-35.

Save the Children (2021). *Children have lost more than a third of their school year to COVID-19 pandemic*. https://www.savethechildreorg.au/media/media-releases/children-have-lost-more-than-a-third

Trinchero, R., Robasto, D. (2019). *I Mixed Methods nella Ricerca Educativa*. Milan, Mondadori.

Ufficio Scolastico Regionale E-R (2020). Fact sheet a.s. 2019/2020 https://www.istruzioneer.gov.it/wp-content/uploads/2019/09/19_20-2-Studenti-e-studenti-disabili-2.pdf

UNESCO, UNICEF, World Bank (2020). *What Have We Learnt?: Overview of Findings from a Survey of Ministries of Education on National Responses to COVID-19*. Paris, New York, Washington D.C., UNESCO, UNICEF, World Bank.