



Czech School
Inspectorate

**Distance learning in basic and upper
secondary schools in the Czech Republic**
(abridged version for international audience)

Thematic report

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Distance learning in basic and upper secondary schools in the Czech Republic

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Thematic report

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1 Introduction

Following the announcement of a prohibition of the physical presence of pupils in basic and upper secondary schools from 11 March 2020, along with measures taken by the Czech government during the covid-19 pandemic, a completely exceptional situation arose for which schools, pupils and their parents¹ had not received any systematic preparation in the past. Schools were forced to find a way to effectively fulfil their role and ensure the education of pupils even in completely non-standard conditions basically overnight. Due to the mass spread of digital technologies, these technologies were used to varying degrees in distance² learning. The starting position of schools differed - from schools that had minimal experience with the use of digital technologies in teaching and the focus of which rather reduced the influence of technologies, to schools that were well equipped with digital technologies, their teachers were used to working with technologies in teaching and their teaching activities had been set up for a long time in such a form that pupils could participate distantly (e.g. at the time of their illness, etc.).

During the first two weeks of the school closure, many schools were trying to find out how to arrange education, including which communication platforms to use, etc. At the same time, they were trying to understand the conditions in the families of individual pupils so that they could respond to them. In three weeks after the school closure the situation became much more stabilised in most of the schools.

From 1 April 2020 to 14 April 2020, the Czech School Inspectorate carried out a specific thematic survey through a series of structured telephone interviews with principals of almost all basic and upper secondary schools, aimed at describing the situation in individual schools during distance education, identifying school needs and providing methodological support to schools.

Table No. 1 Schools involved in structured telephone interviews

Region	Basic schools (primary level)	Basic schools (primary and lower secondary levels)	Upper secondary schools	Total
Jihočeský	74	157	78	309
Jihomoravský	198	249	92	539
Karlovarský	24	81	30	135
Královéhradecký	106	124	54	284
Liberecký	71	108	46	225
Moravskoslezský	128	272	122	522
Olomoucký	115	154	73	342
Pardubický	101	131	63	295
Plzeňský	72	122	46	240
Praha	38	204	158	400
Středočeský	200	312	130	642
Ústecký	59	193	77	329
Vysočina	116	133	52	301
Zlínský	103	132	63	298
Total	1,405	2,372	1,084	4,861

¹ For simplification, the term parent is freely used in the text instead of the term legal representative.

² In the text, the terms distance learning, online learning or distance education are used completely freely, without reference to terminological accuracy or legislative anchoring of the given forms of education.

Table No. 2 Structure of upper secondary schools involved in structured telephone interviews

Upper secondary schools with a predominance of pupils in vocational programmes finished with a high school diploma (maturita)	539
Upper secondary schools with a predominance of pupils in general programme finished with a high school diploma (maturita)	323
Upper secondary schools with a predominance of pupils in vocational programmes finished with a VET certificate	211
Other upper secondary schools (conservatoires, etc.)	11

The key findings were published on Wednesday, 15 April, 2020. The thematic report, that was published later, contained selected findings and analysis and also comments on information provided by school principals.

In terms of content, the findings are presented either in summary or separately with regard to the situation at the primary level of basic schools, the situation in the education of pupils preparing for entrance exams to upper secondary school fields with a high school diploma (maturita) or the education of upper secondary students who were going to take high school diploma or VET certificate exam at the end of the school year 2019/2020. In the boxes, specific examples of school work and inspiring practice, which were recorded during structured telephone interviews by the Czech School Inspectorate, are shown in italics.

Although it is evident that in the coming weeks after data collection the situation in many schools developed even further and principals' awareness of various aspects of distance learning increased, based on the information obtained, it can be stated that the vast majority of schools have withstood a very extraordinary situation and were trying to make their best to fulfil their mission.

This report was prepared to provide the international audience with an overview of the findings from the original Czech version of the thematic report published in May 2020.

In the Czech Republic, all basic and upper secondary school buildings were closed for presence of students from March 11 until May 24. Primary level of basic schools was reopened for voluntary presence of students from May 25 until June 30 (end of the school year). Lower secondary and upper secondary students continued with distance learning from May 25 until June 30 with the only exception of regular face-to-face consultations that schools organized for final grade students of basic and upper secondary schools.

2 Summary of main findings

In the period from 1 April to 14 April 2020, the Czech School Inspectorate carried out a thematic survey through a series of structured telephone interviews with the principals of almost 5,000 basic and upper secondary schools. The aim of the survey was to find out in what forms and ways schools perform so-called distance education, what they focus on in education, how they manage to communicate with pupils, what obstacles they encounter or what kind of help or support they need.

The vast majority of pupils at basic and upper secondary schools were involved in distance education. However there were certain differences in the scope and manner of their involvement. Only 11% of pupils in basic schools with primary level and 16% of pupils in basic schools with primary and lower secondary levels weren't involved in online communication with their school.

In the case of upper secondary schools, bigger problems were recorded in vocational programmes finished with a VET certificate, in which more than a fifth of pupils weren't involved in online communication. It is positive that schools managed to involve even most of the pupils without online communication in distance education. Nevertheless, there were about 9,500 basic and upper secondary school pupils who weren't in touch with their schools at all, and therefore these pupils didn't participate in any form of education during the school closure.

Main reasons for the absence of online communication with some pupils were either the lack of ICT equipment or insufficient internet connection. Another important factor was the low motivation of some pupils for education or weaker support from their parents, who, of course, had to deal with a number of other work or personal issues. The most difficult situation in this respect was in regions with lower socio-economic status and especially in socially disadvantaged areas. However, a very positive fact is that even in these areas, schools did their best to implement distance learning for students and were looking for ways of delivering school work to students and to communicate with them.

Various platforms were used to communicate with parents and pupils. In the primary level of basic schools, WhatsApp, Skype and Facebook were used most often. In the lower secondary level, Bakaláři and Google Classroom were used as well. In upper secondary schools, on the other hand, Bakaláři information system was of the most common use, and Microsoft Teams was also used frequently. In more than a half of basic and upper secondary schools, one platform was used by all teachers, in more than 40% of basic and upper secondary schools more than one platform was used.

During the school closure, a half of basic and more than 60% of upper secondary schools were trying to continue with teaching according to the thematic plans of individual teachers, in accordance with the school educational programme. Thus, determining the specific thematic priorities on which the school focuses in distance education wasn't very common, even though it might have been useful in the new context. A positive finding was that practically all basic and upper secondary schools focused on practising and repeating topics taught and discussed before. However, more than 80% of basic schools and more than 90% of upper secondary schools simultaneously tried to present new topics to pupils distantly. However, this could be very complicating for students themselves and especially for their families. The main goal of distance education should be to maintain pupils' habits associated with school work, not necessarily the effort to teach as much as possible according to the school educational programme.

In general, it is obvious that providing feedback to students has become even more important in distance learning compared to non-covid-19 time. Most schools provided feedback to their students during distance learning - focusing usually on motivation and formative function of the feedback. Some schools used usual marking of school work that had been assigned remotely. At the same time, however, there was a significant proportion of schools whose teachers only assigned tasks to pupils without providing any subsequent support to them. This approach, however, cannot be considered appropriate.

Before the covid-19 pandemic, teachers often educated their students using digital technologies in less than a fifth of basic and upper secondary schools. The teachers' work in the new conditions of distance education is therefore assessed as more demanding, but teachers are

willing to respond to the challenges posed by the new conditions. The willingness of schools to make more use of digital technologies also with students back to schools is highly appreciated.

This report was prepared to provide the international audience with an overview of the findings from the original Czech version of the thematic report published in May 2020.

3 Involvement of pupils in distance education

The fundamental questions that the Czech School Inspectorate was looking for an answer to were whether it was possible to involve all pupils in distance forms of education, what proportion of pupils maintained online communication with their teachers and in what ways contact was maintained with pupils without internet access.

Three weeks after the prohibition of the physical presence of pupils in education, there was already a significant proportion of schools that established regular communication with all their pupils. More than a third of schools (35%) provided online education for all their pupils to some extent. The amount of pupils' involvement was related to their digital equipment, internet access and, in some cases, their willingness to engage in distance learning, including the willingness of their families to support them in distance learning.

3.1 Involvement of pupils in “incomplete” basic schools (with primary level only)

These influences are also reflected in the high proportion of incomplete basic schools, i.e. basic schools with primary level, which managed to involve all pupils in distance education (43% of schools). To ensure online communication, these schools often lent digital technology equipment to their students; either to those students who did not have equipment for online connection or to those who had more brothers or sisters, and thus had limited access to digital technologies.

In cooperation with the school founder, the school provided one socially disadvantaged family with a free internet access.

At school, they lent tablets with internet connection to parents.

Only about 11% of pupils in these schools weren't involved in online communication with their school. They were mostly involved in education in other ways, which are described below. The creative approach of teachers and school leaders led to the minimization of the number of pupils at basic schools with only primary level who were not involved in distance education at all (according to the principals' estimate, only about 0.5% of pupils were not involved at all).

In order to involve socially disadvantaged pupils, schools used teaching assistants or even the help of non-profit organizations.

The school involves actively teaching assistants in distance education. They ensure the physical delivery of school tasks for pupils from socially disadvantaged background. For pupils with different mother tongues, they help individually in families.

The school cooperates with the non-profit organization Cheiron T in Tábor in addressing socially disadvantaged pupils.

Schools allowed pupils to obtain materials for distance learning in other ways, including the involvement of local partners in supporting education.

The school prints worksheets for those primary level pupils who need it. Materials are delivered to pupils together with personal messages via a mailbox in a local store (the transfer also works the other way round).

The printed tasks are thrown into the mailbox for all pupils every Monday (the school has only 26 pupils, the tasks are delivered by the teachers), the completed tasks are returned to the school box (usually delivered by parents).

The school has set up a “bookbox” to store all the materials for students so that parents do not have to print documents at home. It also provides educational materials for pre-schoolers, who can join voluntarily as well.

Parents of pupils who do not have access to a printer can, in agreement with the school principal and the mayors of the municipalities for which the school is a catchment school (six municipalities), use printers at the municipal offices.

Basic schools with primary level which failed to involve some pupils often stated problems in communication with legal representatives as a reason.

3.2 Involvement of pupils in “complete” basic schools (with both primary and lower secondary level)

The share of “complete” basic schools which managed to involve all pupils was less than a half (21%) compared to “incomplete” basic schools. About 16% of the pupils of these schools weren't involved in online communication with their school, but they were involved in distance learning in other ways. The main reason why the pupils of these schools were not involved in online education was lack of ICT equipment or internet connection.

Based on the principals' responses it could be estimated that the total share of uninvolved pupils in complete basic schools was about 0.7%. The motivation of pupils or their social background had more significant impact on the involvement of pupils in education at complete basic schools compared to incomplete basic schools, and, similarly to incomplete basic schools, there were also problems with communication with parents or guardians.

Lower interest was found among 9th grade pupils who were either preparing for entrance exams on their own or who had applied for secondary vocational schools and were not preparing for entrance exams.

School management tried to promote approaches that motivate pupils' involvement in education.

The school places particular emphasis on meeting the social needs of pupils, the goal is not to lose contact, motivate them for learning, and help their family to manage the unusual period as smoothly as possible. Therefore, the school has rapidly resorted to using of ICT for mutual group communication and the pupils themselves decide whether they join the school work or not.

As at incomplete basic schools, complete basic schools involved teaching assistants and cooperated with non-profit socially-oriented organizations.

The school managed to establish contact with non-communicating parents from socially disadvantaged areas thanks to the involvement of the non-profit organization Český Západ. It also ensures the delivery of the tasks to these families in paper form once a week.

Pupils with special educational needs (hereinafter referred to as "SEN") were used to the support from a teaching assistant; the assistants connected with pupils via computer and provided advice or support.

3.3 Involvement of upper secondary school students

In upper secondary schools, the situation varied according to the study programmes. Schools with the majority of pupils studying general track (gymnázium) experienced the least problems in this respect. Three quarters of these schools succeeded in involving all students in online education, having only 4% of pupils without online communication and 0.25% of pupils without any communication.

Even in general upper secondary schools, school management provided some pupils with access to online education through school digital technology equipment.

The school lent computers to legal representatives if there are more siblings in the family.

On the contrary, the biggest problems with the involvement of all pupils in online communication were found in upper secondary schools with a predominance of pupils studying programmes finished with VET certificate. Only one quarter of these schools succeeded in involving all pupils. Online communication could not be established with more than one-fifth of the pupils, and more than 1.5% of the pupils of these schools didn't participate in distance education at all. According to school principals, the main reason for the high proportion of pupils who did not participate in distance education at all was their low motivation for learning.

However, even in this group of schools, some schools managed to motivate and involve pupils from socially disadvantaged backgrounds.

Involvement of the school psychologist in cooperation with all pupils for their support and obtaining feedback from them for pedagogical staff through a structured interviews.

Often the pupils of these schools were involved in activities which, although not directly related to the education according to the set curriculum, were the activities needed at that time.

The school provided protective shields and goggles for medical staff. Pupils in the excluded locality in Most sewed masks for people in need.

Some pupils became involved in volunteering, for example by working in the forest.

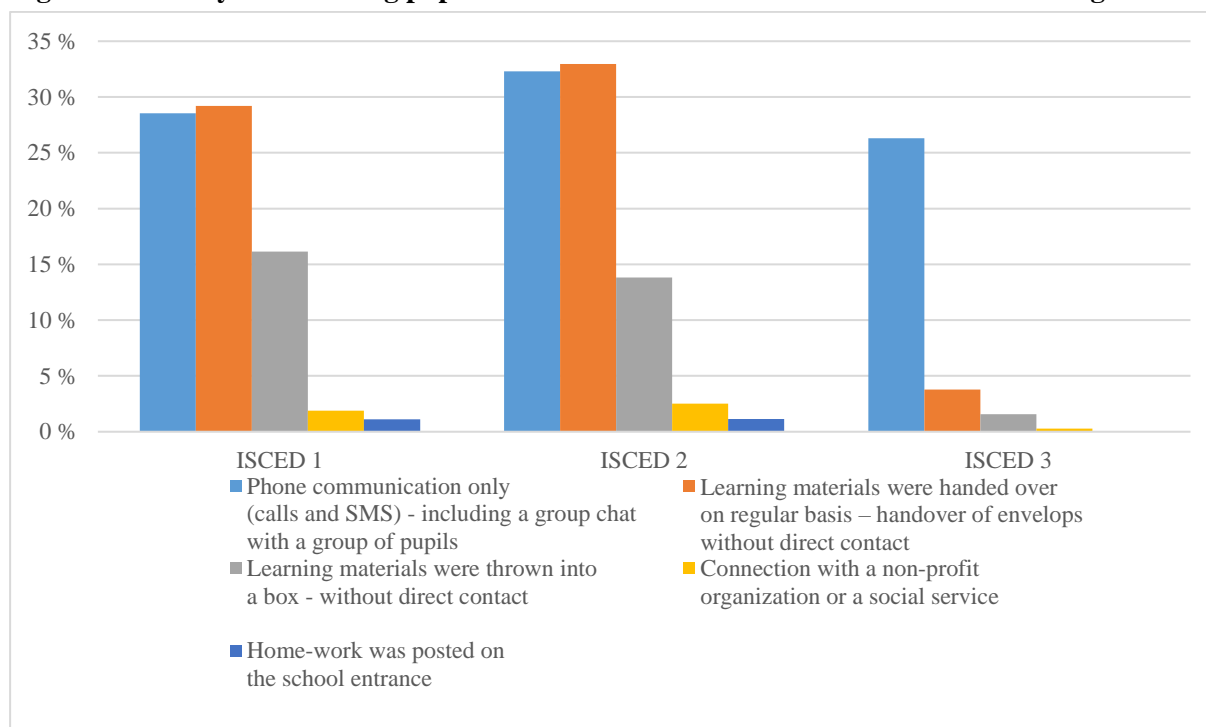
More than half of the upper secondary schools with a predominance of pupils in vocational programmes finished with high school diploma (maturita) successfully involved all pupils in online education. One-eighth of pupils (13%) of these schools failed to engage in online communication and only about 0.8 % of pupils weren't involved in distance education at all.

As in the upper secondary vocational schools mentioned above, the main issue here was the low motivation of pupils for learning.

The school sent ICT equipment to pupils from socially disadvantaged families, including the provision of internet connection, to guarantee 100% online learning opportunities.

The Figure 1 compares various ways of involving pupils without an online connection in distance learning in basic schools with primary and lower secondary levels and upper secondary schools.

Figure No. 1 Ways of involving pupils without an online connection in distance learning



The above mentioned findings from basic and upper secondary schools show that the degree of involvement, or the proportions of uninvolved pupils, are mainly related to the two factors:

- lack of communication with legal representatives, which were among the main reasons for not involving primary school pupils,
- low interest of pupils in education, which deepens with increasing age (those pupils who are not even interested in regular teaching are not involved).

In order to improve education in the future, it would be appropriate to focus on eliminating these two factors.

On the contrary, the high proportion of pupils involved is related at least to:

- the ability to provide appropriate ICT equipment to pupils who, for some reason, do not have it at all or have to share it with their siblings,
- creative ways of involving pupils without any online connection or pupils with SEN.

4 Organization of distance learning

Distance education meant fundamental changes of the organization of the educational process because the schools often had to choose completely different organizational forms than the usual and dominant frontal teaching, etc. Due to the massive use of digital technologies, changes in the organization of education also brought a high need for gaining new digital competencies, which wouldn't be gained so easily by many teachers and principals in standard non-Covid conditions.

This situation, of course, led to an increase in workload for most teachers and also to an increase in its complexity. During the first three weeks of the school closure, more than two fifths of principals said that education under the current conditions had been much more demanding for teachers compared to what they were used to.

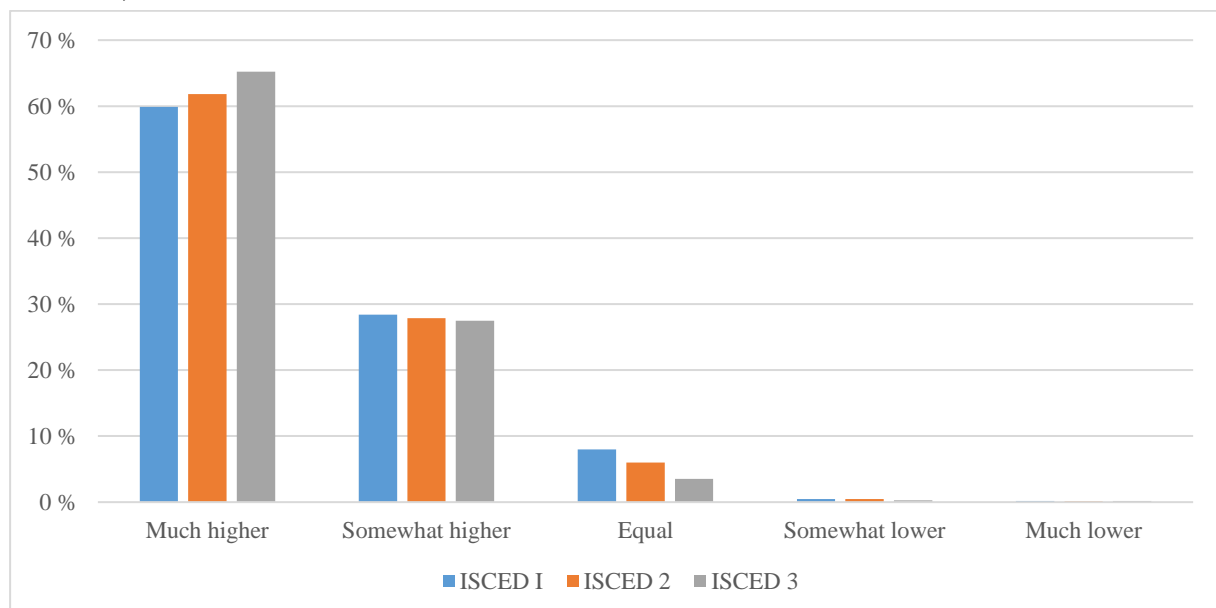
The high level of complexity of the organization of distance education is related to several facts. Above all, it is the specificity of the use of digital technologies, which weren't used by many teachers before. Nevertheless, the use of technologies isn't a major obstacle from the teachers' point of view; on the contrary, teachers are willing to use digital technologies to a high extent without further support.

The second fact is represented by the increased demands associated with the need to think about the content of education, to look for suitable learning tasks, and also to individualize education with regard to different capacities of individual pupils. Transferring a regular lesson to an online environment is technically possible, but impractical in terms of didactics in comparison with some quality online teaching resources, which are usually less time-demanding and professionally prepared which helps keeping the students' attention.

As for the frequency of using digital technologies even before the school closure, the technologies were used more often in upper secondary schools than in basic schools. The higher complexity of distance learning, which is reported in upper secondary schools, is therefore less related to the use of digital technologies, but demonstrates the higher demands on pedagogical and didactic skills of teachers in upper secondary schools and partly in the basic schools with lower secondary level.

After the school reopening, it would be useful to reflect on these skills, which teachers had to apply in the new situation, and to use them for improving regular teaching.

Figure No. 2 According to your estimate, how difficult for your teachers (on average) is providing distance education compared to the standard education at school (consider time and mental demands)?



5 Content of distance learning

Distance learning often meant, in addition to a fundamental change in the organization of teaching, changes in the content of teaching. The main reasons for the changes in content included a difficult implementation of some topics in the distance form, shorter time that students can spend on education while staying at home, and the need to reduce the demands on students due to different effectiveness of distance learning methods, and due to more time required for distant communication. The content of education in regular teaching is determined by the curriculum in the school educational programme; the educational content is usually scheduled in the thematic plans. However, in many schools, despite the existence of the curriculum, the content of education is in fact determined by the content of the textbooks used.

5.1 Changes in the content in basic schools

In less than one third of basic schools, the school management decided on the content priorities of education after the school closure. In more than a tenth of complete basic schools, subject committees were more significantly involved in deciding on content priorities. In half of the basic schools, the teachers followed the original thematic plans even during the emergency period. It means that teachers tried to convert the existing teaching practices into the online environment without making any changes.

Teachers teach by videoconferencing, in home environment they created temporary boards for explanation and practice.

If the school management decided on the content priorities, then emphasis was placed either on the core subjects (Czech language, mathematics or a foreign language), or, from the teachers' point of view, on the basic curriculum, or a choice from the curriculum was recommended. Such a procedure can undoubtedly be recommended.

They adapted the thematic plans to what could be taught distantly. More difficult topics were left until pupils can attend schools.

In some basic schools, the teaching of the physical education, arts and similar subjects was paused, while in other it was adjusted to the new conditions.

After 14 days, the teachers also started teaching PE, arts and similar and got positive reactions from pupils, who had some rest between the key subjects.

At school, they announced a competition for the most imaginative artistic design of a mask, and students created a cartoon called "I, coronavirus."

Recommendations for the adjustment of educational content were rather more general in some schools, formulated for example as a recommendation not to overburden pupils and parents and to mainly repeat and practice. These accents were often reflected in a greater differentiation of educational content. Such an approach can also be considered appropriate.

Together, the teaching staff creates weekly plans for pupils at three levels: 1) elementary - for most pupils, 2) for pupils with SEN, 3) for "enthusiasts and fast learners" with optional extra tasks. Older pupils create a collection of tasks for classmates or younger pupils.

Due to the different conditions of individual pupils and to the differences already apparent before the school closure, many schools were intensively looking for ways to eliminate excessive differences between pupils, e.g. by strengthening the individualization of educational goals.

The school sets individual educational goals for pupils and a suitable educational offer for them, thus preventing possible inequalities between individual pupils after their return to schools. The school has its own criteria for pupil assessment, which can be used even during distance learning. It uses verbal assessment for all pupils.

Rarely, the situation was used to emphasize the development of learning competence or to modify the scope of the curriculum in a particular school programme.

A Learning Diary was introduced in the school. They write everything beyond compulsory learning, recommended links and additional independent educational activities in it.

The organization of the distance education provides feedback to the future school management, along with the determination of the necessary minimum curriculum in the syllabi of individual subjects.

Overall, the emphasis in all basic schools was put on practicing. In more than 80% of basic schools, teaching was also focused on teaching of new topics. A lower proportion of schools (approximately three fifths) used distance learning to provide additional tasks.

5.2 Changes in the content in upper secondary schools

Compared to the basic schools, the management of upper secondary schools determined the content priorities to a lesser extent and the content was predominantly determined by thematic plans, or curricula in the school educational programme of a particular school, or it was determined by textbooks used by teachers. If the management set the content priorities, then it did so for the most important subjects within the educational programme.

At the very beginning of the new situation, the school management determined four groups of subjects decisive to accomplish the graduate profile. It adjusted the weekly schedules, the number of lessons of the individual subjects accordingly. Subject committees set priorities for distance learning. The school management introduced this procedure to the pupils and parents.

Alternatively, the content requirements were adapted to match the pupils' current skills. Reduced content requirements led many schools to reconsider the scope of educational content in the relevant framework or school curriculum.

The school also uses resources for basic schools for elementary subjects and revision - the school's goal is to keep pupils in the process of learning and practicing.

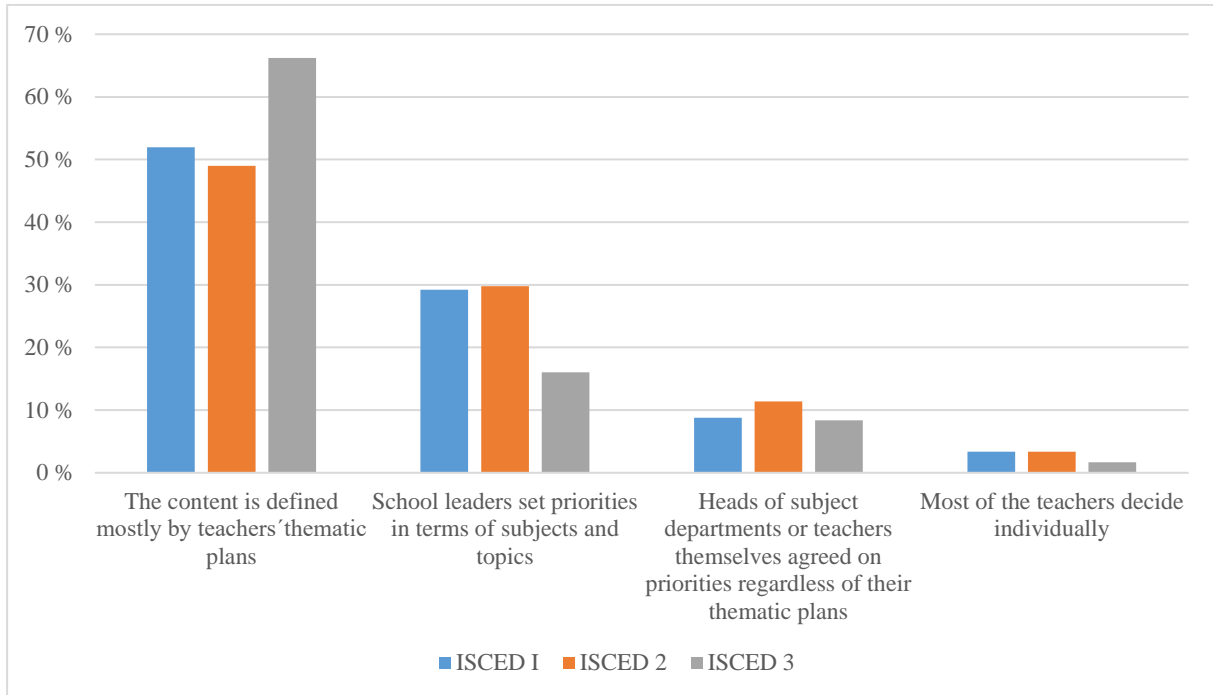
The school used the situation as an impulse to minimize the content of the curriculum - a description of the essential for the education profile, to be used in the discussion on the revision of the framework educational programmes.

Some upper secondary schools used this situation to accentuate topics for which there is less time during the year.

The school used distance education to strengthen pupils' personal development, it strives to expand pupils' knowledge in areas that they are interested in and for which there is no time and space left at schools.

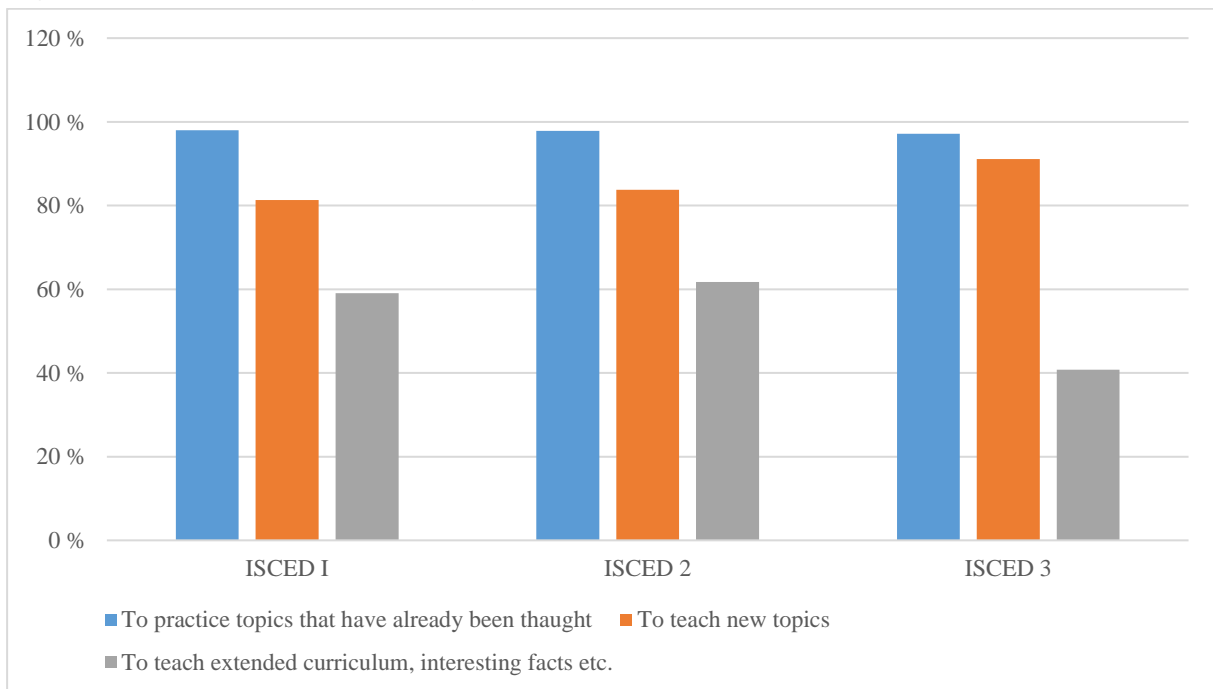
The differences between basic and upper secondary schools in adjusting the content of distance education are shown in the following figure.

Figure No. 3 How the school affects the content coverage of education



As at basic schools, distance education at upper secondary schools was most often dedicated to the practicing and to a large extent to making pupils familiar with new topics, regardless the type of upper secondary school. The share of schools where education was also used to teach extended curriculum, interesting facts, etc. was significantly lower. These included about a half of general secondary schools, but less than a third of schools with a predominance of pupils in programmes finished with VET certificate.

Figure No. 4 What do teachers mainly use distance education for?



5.3 Use of content resources

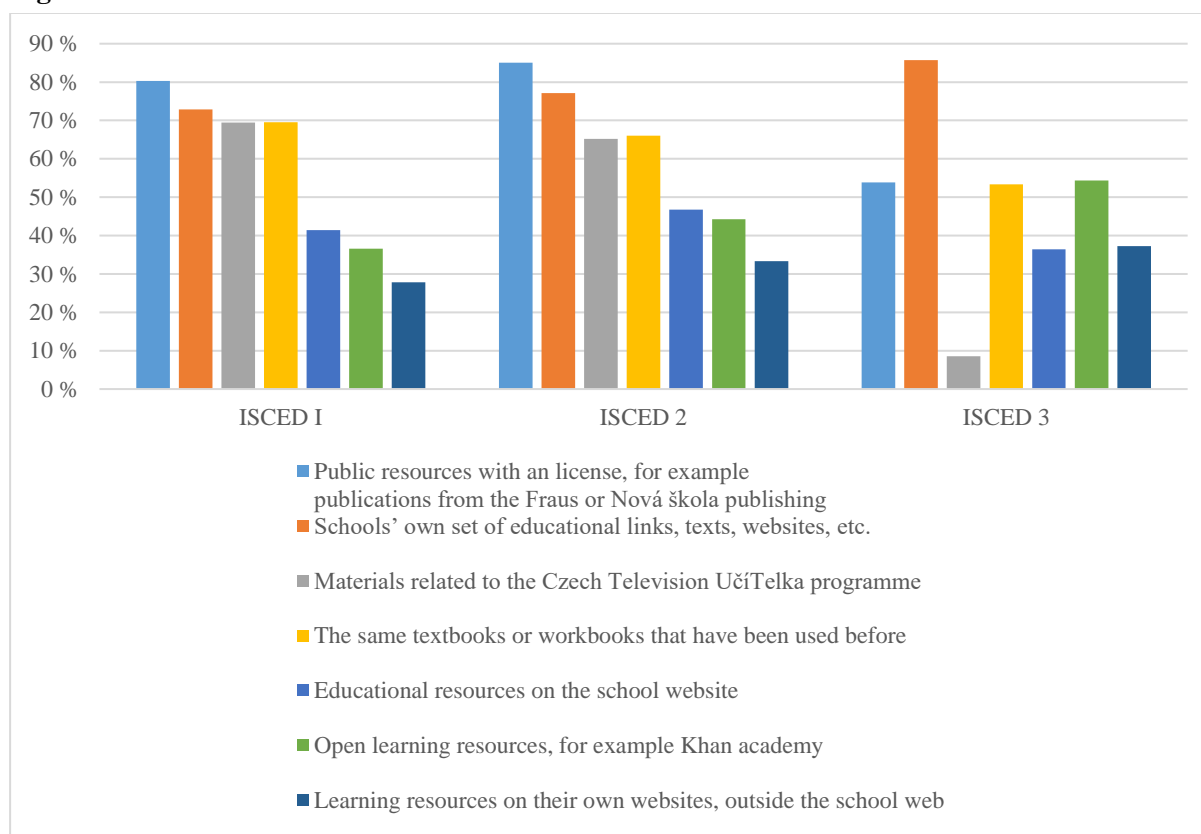
In basic schools, licensed resources were predominantly used, which were made available to all schools after the school closure. These were, for example, publications from the Fraus or Nová škola publishing houses, etc. Furthermore, the schools' own sets of educational links, texts, websites, etc. were used very often, together with materials related to the Czech Television UčíTelka programme and textbooks or workbooks used by schools even before.

Significant differences in approaches can be observed between schools in individual regions. E.g. in Prague, both levels of basic school education were dominated by licensed resources and the schools' own sets of teaching links, texts, websites, etc. Only half of the schools used materials related to the UčíTelka educational programme and textbooks.

In contrast, in the Vysočina Region, the primary levels of basic schools used predominantly textbooks and workbooks that were used by them even before. Documents related to the UčíTelka programme were more significantly used in the Zlínský, Plzeňský, Jihomoravský and Moravskoslezský regions.

Other resources, which were used less frequently at the basic schools with lower secondary level, included the schools' own resources placed on the school's website.

Figure No. 5 Documents most often used in distance education



Specific sources, which were often used without significant differences between regions, included the UčíTelka programme, publications by the Nová škola publishing house, videos on YouTube and publications by the Fraus publishing house. In the primary level of basic schools, the Školákov website was one of the more often used resources. More used in individual regions were the Methodological portal rvp.cz (more than 60% in the Moravskoslezský Region), the Včelka website in the Středočeský and Liberecký regions and the Škola s nadhledem website in the Pardubický and Plzeňský regions.

In the lower secondary level of basic schools, the Scio website belongs to the resources that were used most often (except for the Ústecký, Karlovarský and Vysočina regions).

In upper secondary schools, the schools' own sets of educational links, texts and websites were used most often. In addition to the licensed resources from Fraus publishing house, more open educational resources such as Khan Academy and textbooks and workbooks, which the school had used before, were used. Open educational resources were significantly more frequently used in the Jihočeský, Zlínský, Královéhradecký and Moravskoslezský regions. Educational resources on websites outside the school's website were more often used in the Liberecký region.

These teaching resources are usually used to practice, revise or consolidate the acquired knowledge or skills; to a much lesser extent they are used to present new topics or as an additional content.

In basic schools, teachers often modified their content sources or created their own learning materials based on them.

Changes in the content of education demonstrate a high degree of diversification of educational content in basic and upper secondary schools. Despite the high autonomy that schools have, there is a surprisingly low proportion of schools in which principals decided to modify the learning content after the closure of schools and a high proportion of upper secondary schools in particular, where teachers did not significantly modify the content of their subjects or did so only based on their own decision. These facts serve as evidence of significant shortcomings in the curricular and pedagogical work of school management, caused mainly by a long-term emphasis on other functions of the school management than the management of the pedagogical process, which supports findings from various surveys of the Czech School Inspectorate.

6 Providing feedback in distance learning

Changes in the organization of distance learning, adjustments to its content and the pupils' different family background also led educators to change the methods of assessment. The starting point, similarly to the content aspect, was mainly the current practice of teachers at school.

6.1 Methods of evaluating student performance

The standard methods of classification was mostly used at higher school levels. It was used in more than half of the upper secondary schools, and in less than a fifth of the basic schools. School principals often stated that they mitigated the marks, that is, they reduced the weight of the marks or adjusted the marking scale (for example, they rated only 1, 2 and 3, a practice that was used mainly in basic schools). A positive finding in relation to the situation of school closure and its specifics was the predominance of the verbal evaluation in more than half of the basic schools; it was used in less than two fifths of upper secondary schools. Moreover, providing pupils with more detailed feedback on their work without evaluating it was reported by almost two fifths of basic schools and one fifth of upper secondary schools.

About a quarter of basic schools and two fifths of upper secondary schools reported a combination of marking and verbal assessment.

Most teachers provide a detailed feedback to students on their work combined with a percentage rating.

The school provides a frequent feedback to all students and gives them opportunity to correct mistakes.

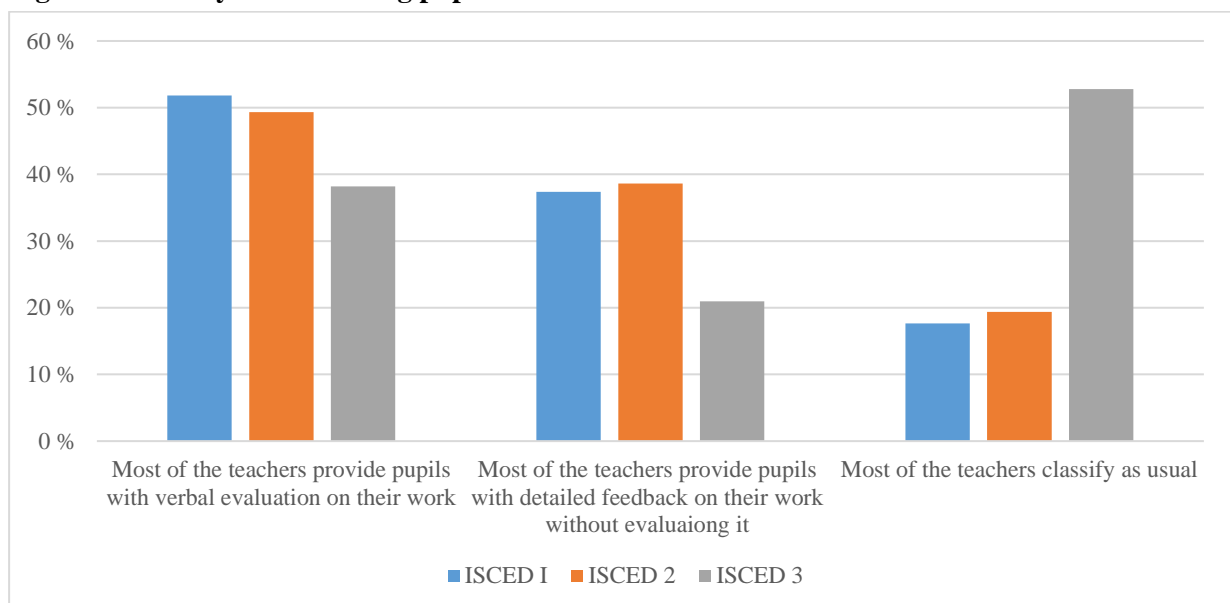
Some schools also mentioned pupils' self-assessment as the predominant form of assessment. In summary, however, this is the case of only one thousandths of the total number of schools. Other schools at least mentioned the motivational importance of assessment for the pupils.

The use of students' self-assessment and immediate feedback in communication between teacher and student.

A very sophisticated system, the unification of all teachers, the use of the so-called triad in the evaluation of students.

The school evaluates the fulfilment of pupils' tasks with a lower weight of importance because the success rate is an important guide for self-evaluation of most pupils. The school wants to use the classification as motivation (not only marks, but also percentages, etc.).

Figure No. 6 Ways of evaluating pupils' work that teachers receive



7 School management and communication

The methods of school management and communication with teachers, pupils and parents three weeks after the school closure said a lot about the management and pedagogical competence of school principals. They mainly focused on ensuring an effective transfer of information between the management and teachers, between the teachers and students or parents, between the school and parents, but also among the teachers within the school. They also tried to ensure the coordination of distance learning both in terms of organization and technology, and in terms of learning content.

7.1 Coordination of digital support for distance learning

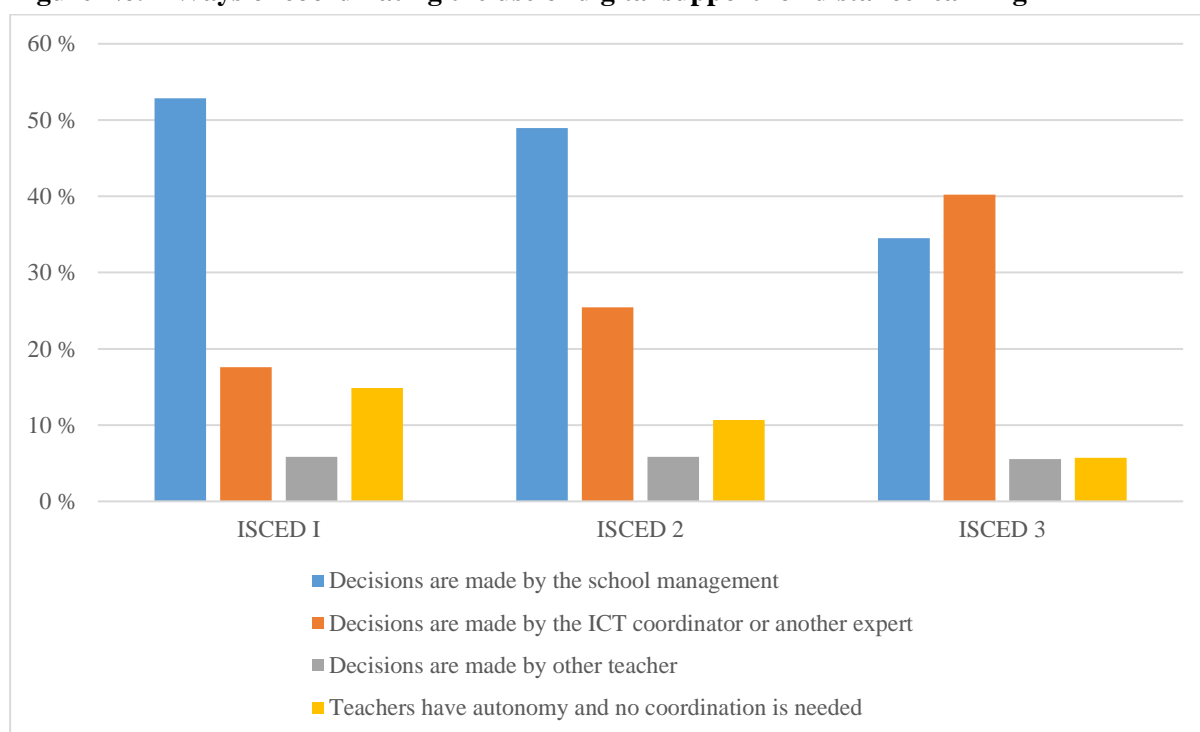
Given that the teachers' experience with digital education had been quite limited in most schools, it is understandable that, in more than three quarters of schools, a person was appointed to coordinate the use of digital technologies in distance learning. In basic schools, the process was coordinated by the school principal. In upper secondary schools, an ICT coordinator was assigned this task. In a smaller group of schools, the coordinating role was taken over by

a teacher who was not an ICT coordinator, but had experience in using digital technologies in teaching.

The school principal reacted flexibly to the situation - she managed to professionally prepare teachers for distance education in one week. She created a primary tool for communication and education, and tolerates also other forms as complementary ones. Most teachers attend school and can use school equipment (they are equipped with iPads).

From the point of view of the school management, an important finding is the relatively high proportion of schools, where, according to the principals, the teachers were independent in this situation, and coordination was not necessary. These schools did not include predominantly schools where most teachers had already used digital technology for teaching. For this reason, there are other factors behind the declared autonomy and need for coordination. One of them is probably the usual way of management in some schools - teachers are minimally coordinated in the pedagogical process, which was exercised even before the school closure.

Figure No. 7 Ways of coordinating the use of digital support for distance learning



The not fully fulfilled role of the school management in content coordination has already been described in the chapter on the content of distance education.

7.2 Communication of teachers with pupils and their parents

The most common means of communication for teachers were e-mails for individual pupils (more often in basic schools) or mass e-mails (more often in upper secondary schools). In basic schools, the school's website was also one of the important means of communication; in upper secondary schools, it was more often a question of specific public platforms (e.g. Google) or school platforms (intranet).

However, schools often adapted specific resources to the situation of pupils and their parents, and tried to focus the content of communication on areas other than the content of education.

The school principal emphasizes the harmonization of requirements and the optimal volume of requirements, regular cooperation in the form of video conferencing is intensified, pupils staying with their grandparents (they are offline) are informed by telephone several times a week in agreement with their legal representatives.

Online class teacher's lessons strengthening relationships and positive atmosphere, the possibility of communication on everyday matters. Inclusion of a group cooperation, assigning tasks requiring online student's cooperation.

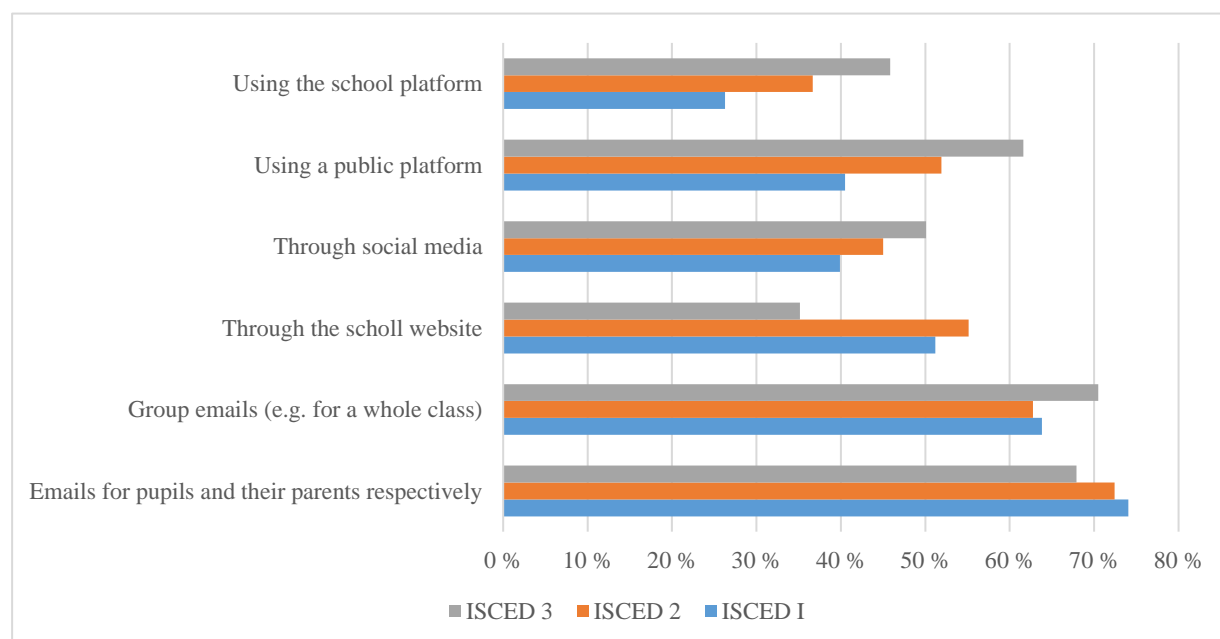
Online class teacher's lessons included interviews on pupils' needs and were also used by some upper secondary schools.

Recommendations for class teachers once a week to implement online class teacher's lessons in order to discuss how students are doing and what they need, no teaching, just social interaction. The school understands the burden for students and their families.

As a part of strengthening the communication with parents, some schools also implemented class meetings for parents.

An experimental meeting with parents took place in one class in the form of a video conference - others will follow. A special pedagogue is involved in the communication who telephones the parents and gets valuable feedback on the school's work.

Figure No. 8 Ways of teachers' communication with pupils and parents



The shared environment for communication with pupils was used by more teachers at higher school levels. Teachers used them for one-way communication mainly at the primary levels of basic schools.

The main issues identified in the field of management and communication include:

- minimum coordination in the use of digital technologies for education,
- no or minimal coordination of the scope and schedule of pupils' responsibilities,
- low level of using digital technologies for online communication.

On the contrary, a positive finding is the high level of creativity and commitment of school principals in ensuring the coordination of all teachers in the use of digital technologies, including regular training, finding the most effective ways to communicate with all participants and creating space for feedback from students and parents.

At the latest after the end of the prohibition of the physical presence of pupils and their return to regular learning, it will be important to ensure the transfer of the positive experience of school principals and support for changes in management practices to other schools, including improvement of communication inside and outside the school.

8 Apps, platforms

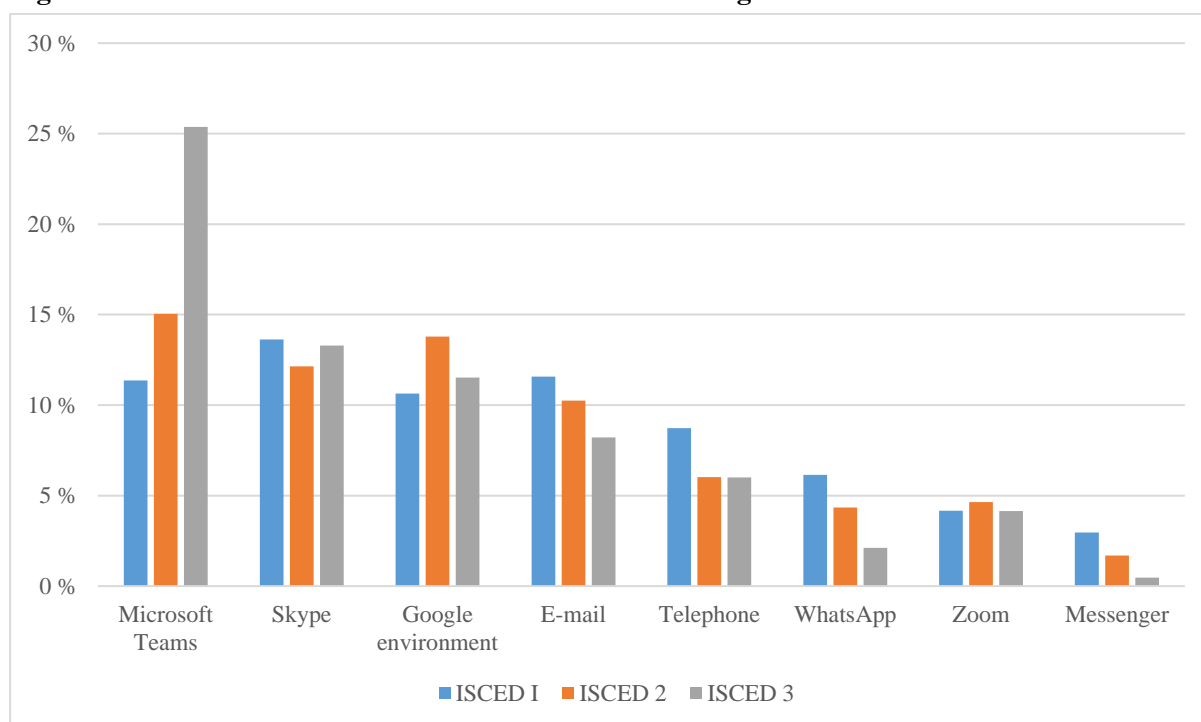
The use of applications, communication platforms and software in schools covered at least three areas. First of all, these were communication tools for holding meetings and ensuring communication with pupils or their parents. Secondly, it was technological support for distance learning, and finally, a specific software that was already used for teaching before the school closure (e.g. accounting programmes at economic schools, etc.).

Given the wide range of opportunities of using different communication and learning platforms, which have their advantages and disadvantages for specific purposes, it was important for the quality of distance learning to ensure that pupils and teachers at least move from one environment to another.

8.1 Technological provision of communication

The survey of the Czech School Inspectorate showed that most basic and upper secondary schools used digital technologies to conduct meetings. The most common platforms were Microsoft Teams, Skype and Google Meet or Google Hangouts. Other resources included e-mail and telephone, and less often WhatsApp, Zoom, and Messenger.

Figure No. 9 Communication tools used to conduct meetings

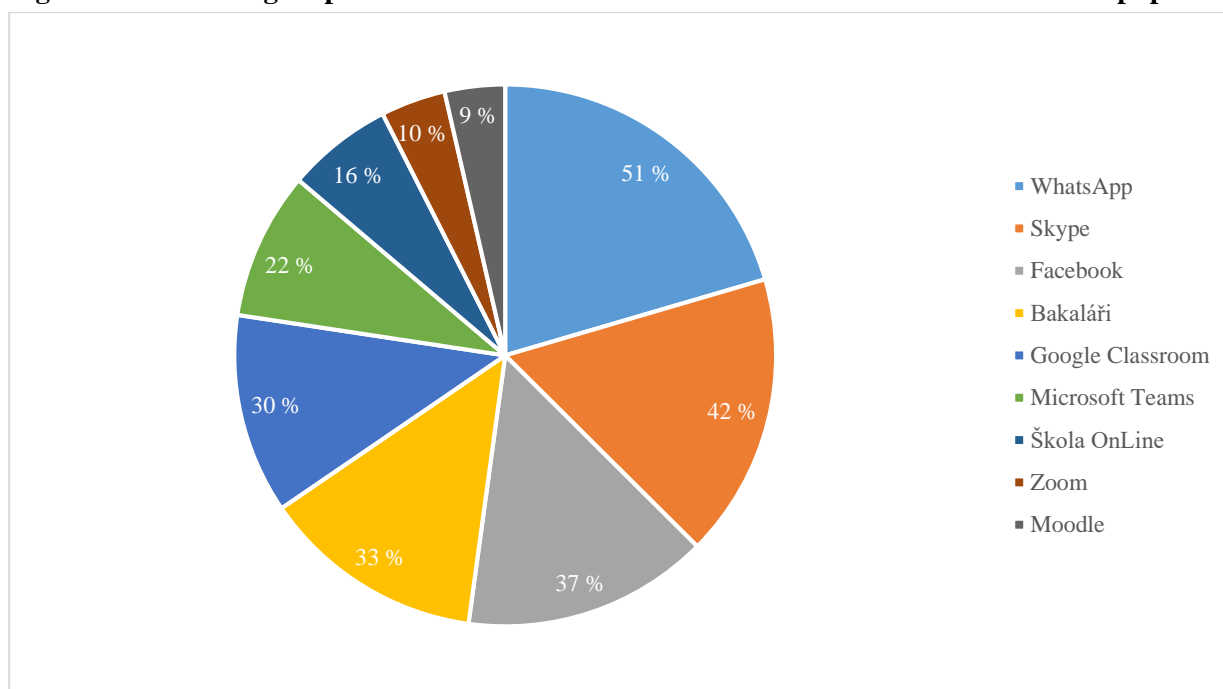


For communication with parents, teachers often chose similar platforms, which they used in meetings with school management. WhatsApp, Skype and Facebook dominated in the primary level of basic schools, and Bakaláři and Google Classroom were used in the lower secondary level of basic schools. In upper secondary schools, on the other hand, the use of the Bakaláři system dominated, and Microsoft Teams was also one of the frequently used platforms.

In the school with small classes, they created closed groups of all parents on WhatsApp, and thus strengthened the communication of parents and pupils with the school.

Teachers also use smartphones to communicate with each other through platforms, such as WhatsApp.

Figure No. 10 Average representation of means of communication between teachers and pupils



9 The influence of the school founders

The structured interviews with school principals confirmed that the quality of a school does not primarily lie in the repaired façade of a school building or in a new school playground provided by the founder. Crucial to the quality of distance education is the overall culture of the school associated especially with the quality of pedagogical leadership. Even in this situation, it is possible to point out interesting examples of cooperation between the school and the founder, which help to improve the educational process.

Sometimes this included, for example, supplementing digital technology equipment for teachers.

The school, in cooperation with the founder, solves a situation where two teachers currently have problems with the lack of digital technology equipment (due to working from home).

The founder also helped by lending digital technology.

Elsewhere, there was a problem with the methodological support provided e.g. by an ICT coordinator at other schools, and the school founder was successfully involved in eliminating the problem.

The school does not have its own ICT coordinator. The founder of the school provided an ICT expert.

The school received assistance from the Information Technology Administration of the City of Plzeň, which offered training in the field of online skills.

Significantly positive cooperation of the school with the founder who provided technical support for online teaching by an expert from among the employees of the municipality.

As mentioned above, in some cases, pupils do not have digital technology or any internet connection at home. Even in these cases, the founders often helped. Other partners in the municipalities also took part in supporting education, such as volunteer firefighters, shops where it was possible to leave materials for pupils and their parents, or local entrepreneurs.

In cooperation with the founder, the school provided one socially very weak family with free internet access.

Cooperation with the founder who prints educational materials for pupils who do not have a possibility to do so.

A school laptop was lent to a pupil with the third level of support measures. Connectivity was provided by the municipality.

The materials are delivered by an authorized employee of the founder.

With the help of the founder, MS Office 365 licenses were purchased for all students and teachers.

In the times of crisis, the quality of communication between school, parents and, of course, the founder is even more evident than ever. The Czech School Inspectorate has been pointing out the importance of communication in its outputs, with 40% of complaints the Czech School Inspectorate receives each school year being due to shortcomings in the area of communication.

10 Conclusions and recommendations

- Within their capabilities, a large proportion of schools have successfully dealt with the rapid transition to the distance form of education and did their best to ensure the educational process effectively even in extraordinary conditions.
- Schools and their leaders were for the most part aware of what needs to be done to educate pupils effectively (feedback from pupils, communication without obstacles, adequacy of the scope and complexity of education, etc.), and, to a large extent, strove to provide that.
- The competence of school principals in pedagogical leadership, the use of digital technologies, streamlining of educational content, ensuring communication and support for school teachers were considered as absolutely necessary and essential in coordinating distance learning. However, the extent of pedagogical leadership in individual schools varied greatly.
- The implementation of distance learning has deepened the differences between the Czech regions. The fundamental differences in the level of school management, in the approaches to teaching and in the conditions for distance education that pupils have in the individual regions have become much more significant.

10.1 Recommendations for schools

- To support cooperation between teachers when modifying the content of education during distance learning period and, under the school principal supervision, to modify curriculum so that the content priorities are understandable for teachers (for teaching at school and if necessary, for further distance education).
- To use the experience with distance learning when assessing pupils, e.g. by focusing more on the positive results of the pupil, using forms of verbal assessment more frequently, increasing the knowledge and skills of teachers in formative assessment etc.
- To maintain the cooperation between parents and schools that started in the period of distance education and to use the set and proven methods of communication with parents and pupils even after the pupils return to schools.

10.2 Recommendations for school founders

- To improve the equipment of schools by increasing number of portable digital technology gadgets for teachers and pupils so that they can use the experience with distance education, for example for the individualization of education.

10.3 Recommendations for the Ministry of Education, Youth and Sports

- To support school principals in acquiring competencies in pedagogical leadership and management of the pedagogical process, e.g. by learning from good practice of school principals who have demonstrated a considerable degree of creativity during distance learning.
- To support educators in the development of digital competencies in order to make full use of the potential of digital technologies for making teaching more effective.
- To use the information on the conditions and course of distance learning and to set principles and recommendations for the organization and implementation of distance education of pupils, including the use of digital technologies.
- To support schools that failed to communicate successfully with parents by presenting the examples of good practice from schools that were successful in communicating with parents.