

# Schools' readiness to use ICT to collaborate with parents:

## Reports on teachers' and school leaders' surveys in Bulgaria

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NOTE: This document presents the results of the surveys conducted in Bulgaria and is presented as an Appendix to the Needs Analysis Reports from all countries participating in E-STEP, that is available in Deliverable D1.2.

## 1 Bulgarian school leaders' survey findings

The survey (questions attached as **Appendix II**) was conducted among school directors from Bulgarian schools and was accessible in one of the Bulgarian Ministry of Education and Science portals, which is traditionally used by Bulgarian schools to receive ICT news and to submit their applications for ICT grants from centralized ministerial funding.

The survey was set on a voluntary basis and it was explicitly stated to the school principals that participation in the survey would in no way affect their application and would have no impact on their application results.

### The Survey

The questions were aimed to identify schools' readiness for intensive ICT use and their willingness to include their ICT toolkit in the communication with parents. There was total of 15 questions, combining closed, multiple choice and open-ended questions, which were intended to provide an overview of the potential to intensify schools' and parents' relations through ICT.

### The schools

Four hundred and eighty-three (483) school principals completed the survey. Among the participating schools 80 are State and 403 are Municipal, which reflects the actual ratio of state and municipal schools in the country (the tendency being more and more schools to be delegated to municipalities in line with the principle for decentralization and delegated budgets). The schools were of various levels, including 229 primary schools, 102 secondary schools and 81 vocational schools. A smaller number of Primary Schools (27) and High schools with specialised classes (24) also took part in the survey. The respondents also represented 7 Sports Schools, 3 General High Schools, 3 Arts Schools, 2 V-XII Grade schools, 2 Special Needs Schools, 1 hospital school, one junior high school (V-VIII grade) and one reform Boarding school. This variety (which more or less corresponds to various types of schools existing in the Bulgarian education system, could be a first indication that the topic of schools'-parents' relation is considered important and relevant to all types and levels of school education.

### The principals

As Fig. 11 shows, the predominant number of principals were aged from 45 to 55, while less than 1% were below 35, which was not surprising, since the years of experience are one of the qualification criteria for principals. On average, the respondents had 12, 56 years of experience as school principals, which is regarded quite long for this position, however there are two predominant

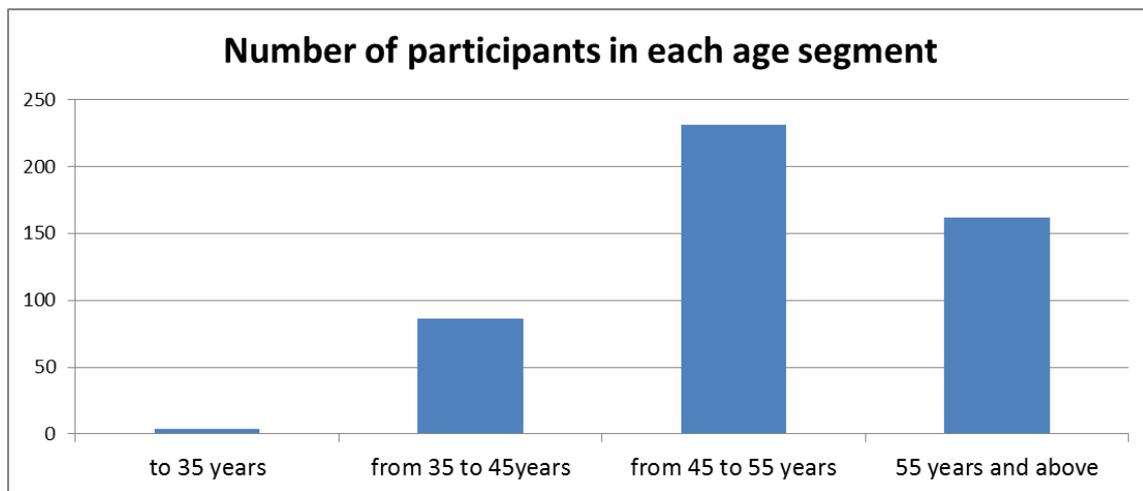


Figure 1 Age ranges of Bulgarian school principals

Categories: people with up to 4 years of experience and people with approximately 20 years. There are just few directors with more than 25 years of experience, with the exception of 15 respondents who had 29 years of experience (Fig. 12).

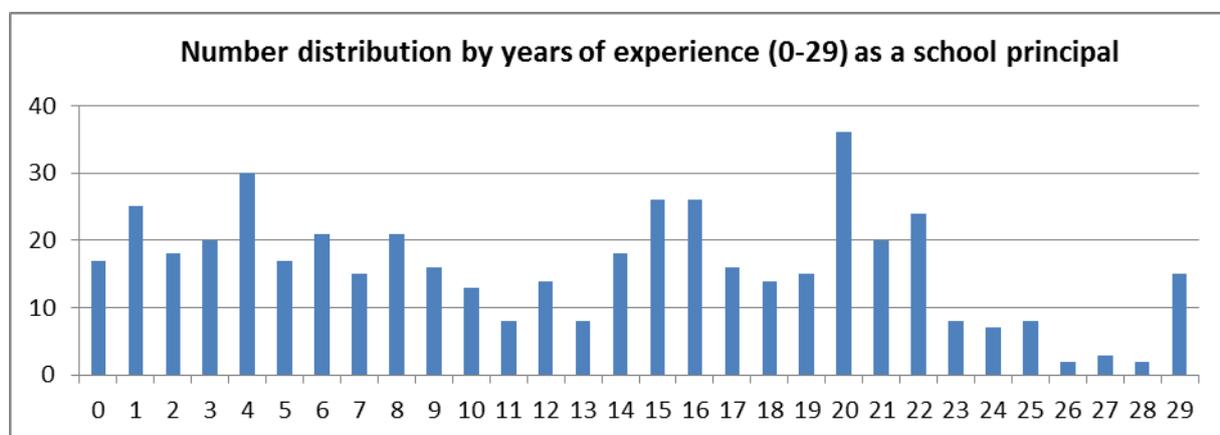
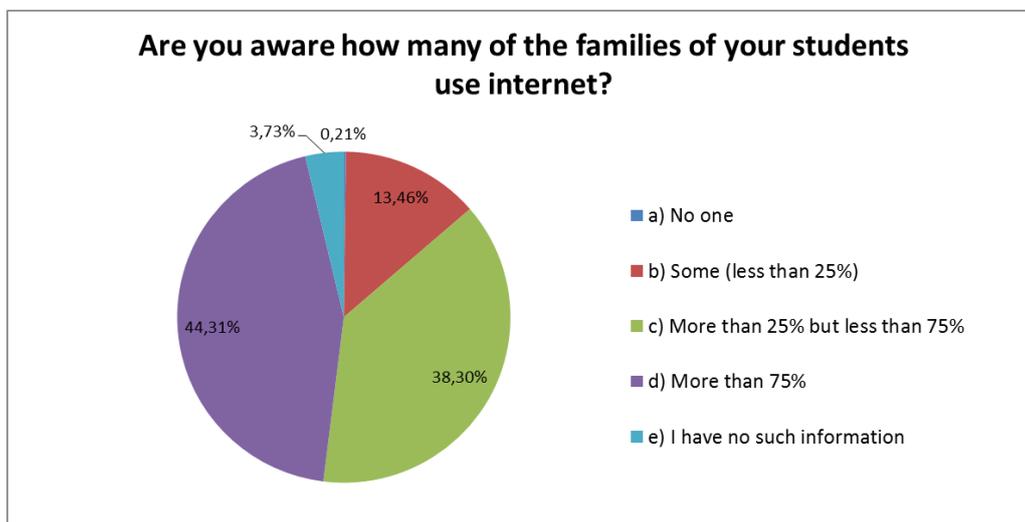


Figure 2 Bulgarian principals' distribution per years of experience

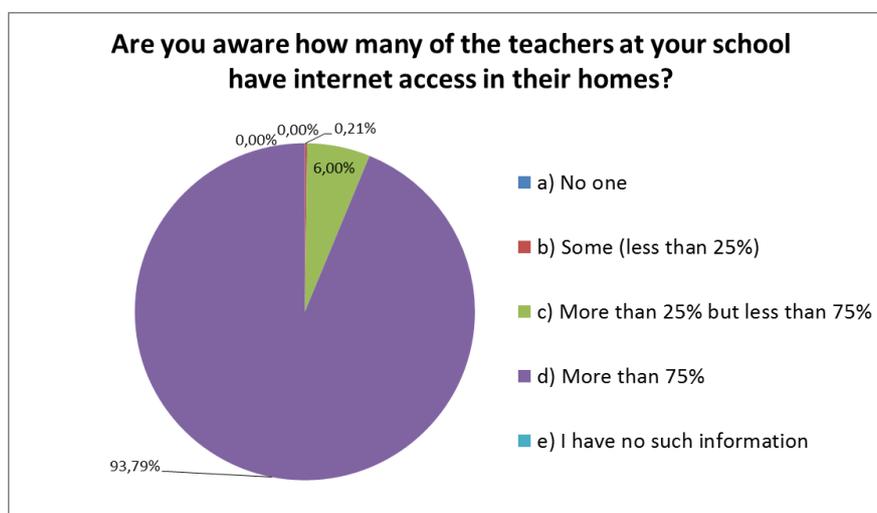
## The answers

The answers were intended both to identify the ICT situation in the schools and families and principals' awareness of the objectives regarding interaction with the use of new technologies and its potential for strengthening relations between school and family.

We use the data to first analyse families' readiness to communicate through ICT. One of the questions in the survey was "Are you aware of how many of the families of your students use internet?" and according to the answers there is clear indication that more than  $\frac{3}{4}$  of the families have internet access. There is just one principal out of 483, working in a small urban village, who pointed out that the families of his/ her pupils had no internet access at all.

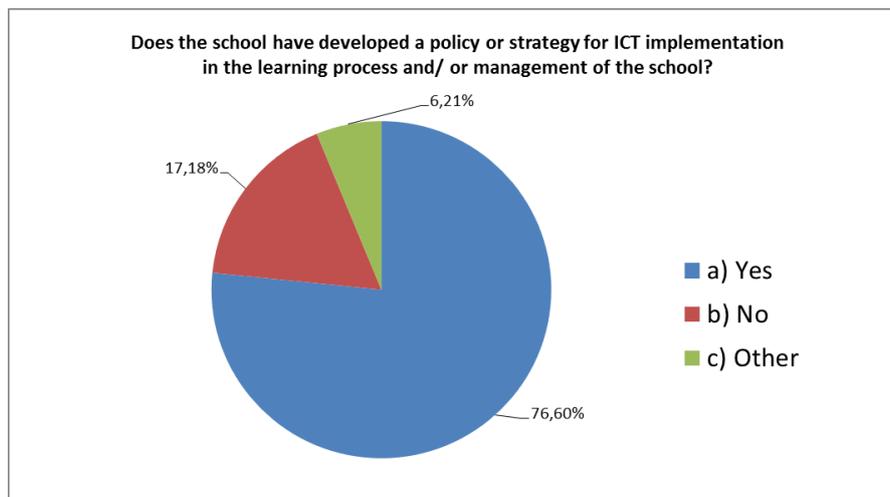


The majority of the principals responded that more than 75% of the teachers in their schools have internet connection at home (Fig. 13), which is an initial favourable condition for making use of the internet to collaborate with pupils' parents.



**Figure 3 Percentages of Bulgarian teachers who have internet access at home**

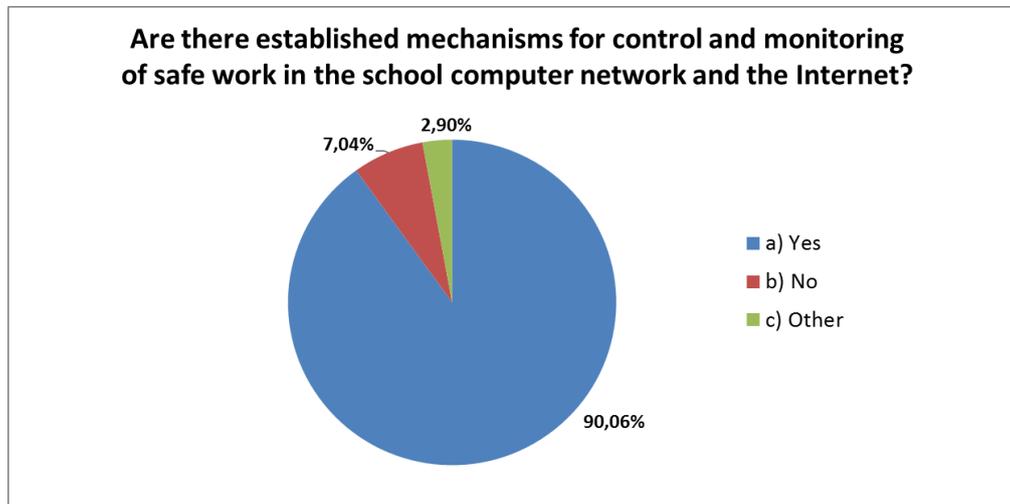
The survey included also a set of four questions that set out to investigate overall readiness for integrating ICT throughout school life, which could be used for further analysis. The results were pretty encouraging, as shown in Fig. 14, since more than 75% of the principals responded that they had developed a policy or strategy for ICT implementation in the learning process and/or management of the school, while a small number responded that they were in the process of establishing such a policy (this was described in their elaborations in the "Other" option response).



**Figure 4 Implementation of school policy for integration of ICT in Bulgarian schools**

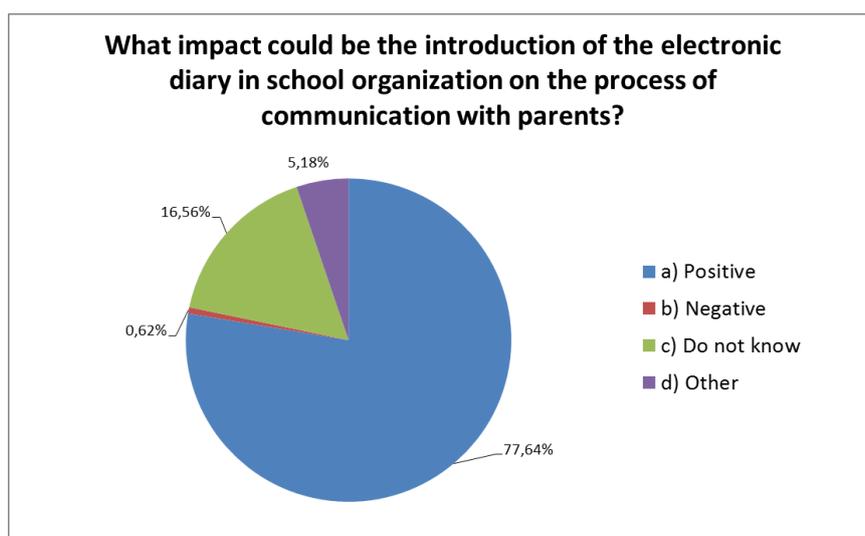
The responses were also very positive in terms of the use of an information system for school management and the extent to which such a system supports school administration: 479 schools out of 483 were found to be using some kind of management information system and only 14 of them do not distinctively agree on the positive effect of the system on the e-administration processes.

The question of having established security and safety mechanisms in the school network was also addressed, yielding positive responses from more than 90% of the principals.



**Figure 5 Establishment of safety and security mechanisms in Bulgarian schools**

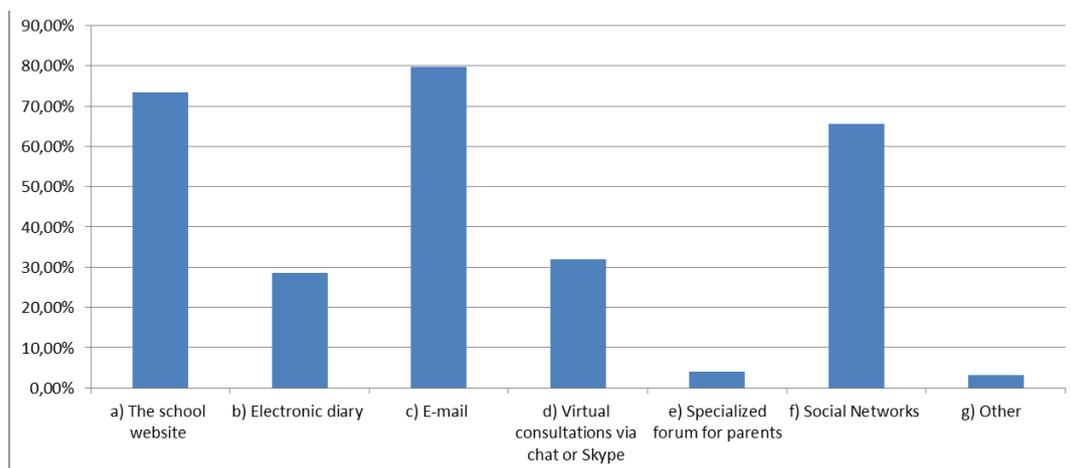
The issue of communicating with parents through ICT was addressed by the following three survey items. The overwhelming majority of school principals (467 out of 483) responded positively to the question "Do you think that new technologies can be useful in communicating with parents?". There were only 4 negative responses, while 12 principals who were uncertain, commented in a rather positive tone on the prospect of communicating with parents through ICT. When asked if they personally support the online communication with parents only 7 of the principals were negative, 414 were very positive and the rest were more or less positive. In terms of more specific examples of ICT tools and applications, the respondents were asked to state their views on the impact that the electronic diary could have in administering the communication with pupils' parents.



**Figure 6 Bulgarian principals' views on the electronic diary use for communication with the parents**

The majority (again more than 75%) expect it to have a positive impact and less than 1% are negative (Fig. 16). The principals that opted for the „Do not know“ or „Other“ response, presented various reasons, associated with local socioeconomic conditions, such as size of the population in the area of the school and physical proximity ( „Our village is small, everyone knows each other, there is no need from electronic diary“), teachers’ overload (“Teachers don’t want to use e-diaries because it doubles their work, since paper diary still exists and is obligatory”), or issues of parents’ lack of internet access.

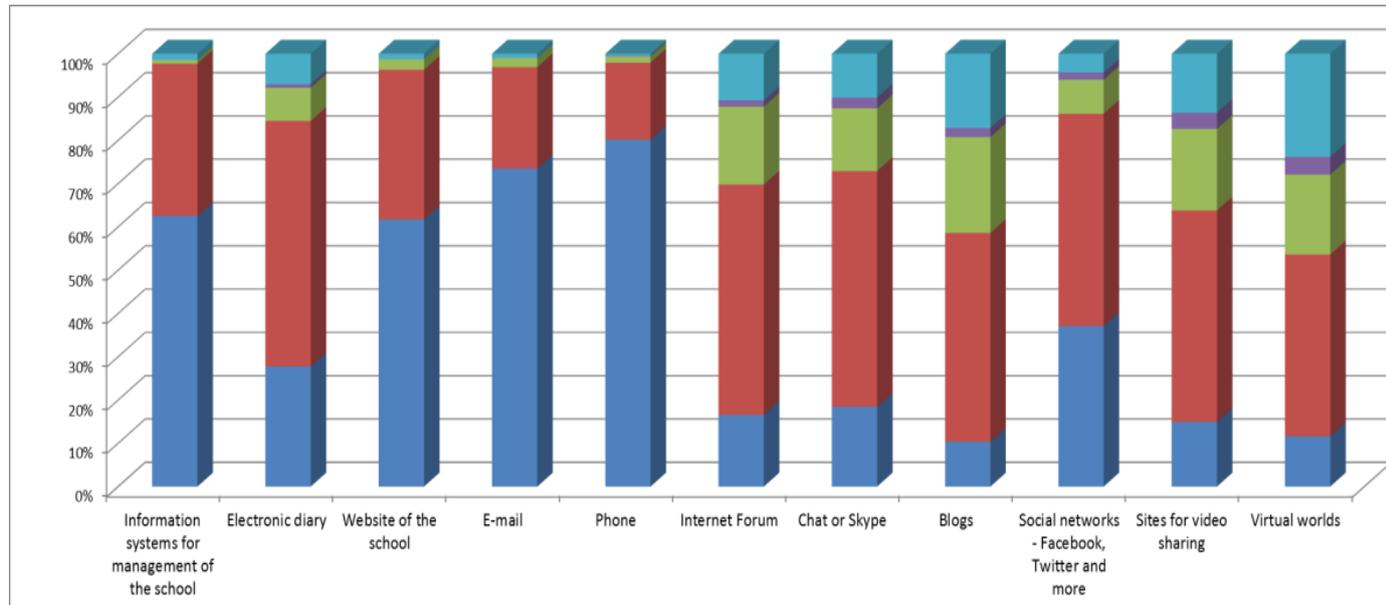
Regarding the current use of ICT tools for communicating with pupils’ families, the most popular one was found to be the e-mail, used by almost 80% of the respondents’ schools, followed by the school website, although in the latter case it is not clear whether this is a one- or a two-way communication with parents (e.g. through online communication forms). Surprisingly social networks were found to be used very frequently by the survey respondents to interact with parents, at a rate of more than 65%. Also, although the electronic diary was rated highly in a previous question on its possible impact for communicating with parents, it turned out to be in practice less popular than most of the other suggested tools. Another interesting finding is that specialised forums for parents are being used to the smallest extent by the particular school principals; this maybe taken into account in the discussion on whether users (teachers/ parents) prefer to use tools and platforms that they are already familiar with (e.g. Facebook, Skype etc) instead of specialised digital environments for parents, provided *ad hoc*.



**Figure 7 ICT tools used for interaction with pupils' families**

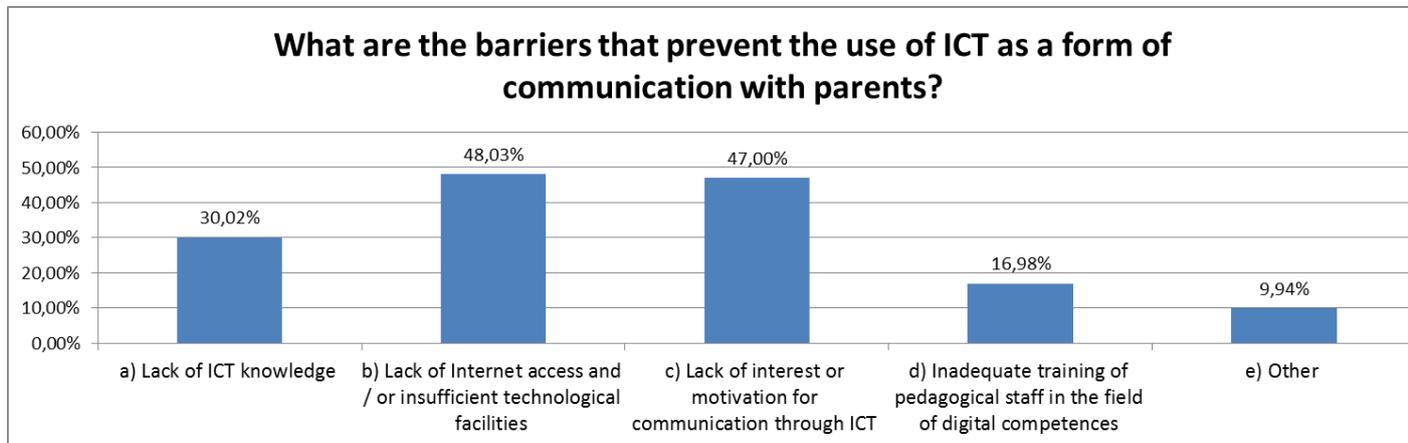
Regarding the perceived potential of specific e-tools to facilitate better interaction between schools and parents, interestingly, the phone was still regarded by the respondents as the most efficient one. As far as the ICT tools are concerned, the information systems for school management are considered to have huge potential, along with the school web site, e-mail and social networks, that based on Fig. 17 are already widely used by these schools. The

electronic diary received again lower scores than the rest of the tools, for reasons possibly associated with the ones previously provided.



**Figure 8 Potential of e-tools to improve interactions between schools and families**

Finally, the last question was related to the potential barriers to the use of ICT as a form of communication with parents. Interestingly, a clearly technical barrier, which is lack of internet accessibility (presumably on the part of parents, since teachers and schools were found from previous items to have established internet access to a great extent) is almost equally high as an attitudinal one, which is lack of interest or motivation to communicate through ICT. Also, although the staff of the participating schools was previously described by the respondents as having good internet access at home, the principals considered that there was lack of ICT knowledge at more than 30% and teacher training in digital competences, at almost 17% of the staff, which could stand as barriers in effective communication with parents through ICT.



**Figure 9 Potential barrier to use of ICT for communication with parents**

Among the other barriers that were described by the respondents, the most typical ones were parents' lack of motivation and time; Parents' persistence for face-to-face communication, especially with younger pupils; Parents' poor digital literacy; Problems in accessibility for parents from underprivileged backgrounds; Teachers' overload with other formal duties and lack of time.

## 2 Bulgarian teachers' survey findings

The survey (questions attached as Appendix III) was conducted among school teachers from Bulgarian schools and was distributed through school principals. It was conducted anonymously, on a volunteer basis, asking teachers to state their views regarding schools-parents' relations. The survey was available during the period 23.05-24.06.2014 and managed to attract 619 responses.

Fifteen questions were included in the survey, intended to identify teachers' readiness for intensive ICT use and their capacity and willingness to include their ICT toolkit in the communication with parents.

### The teachers

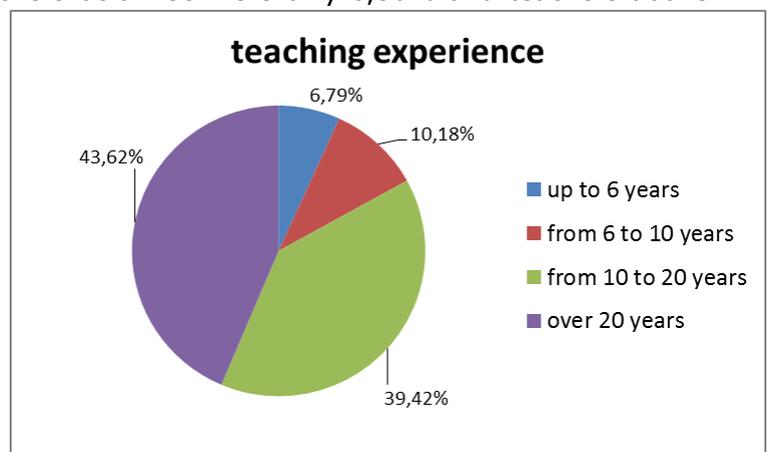
The respondents consisted of 89 male and 530 female teachers, the biggest number of which represent Primary Education (240), followed by teachers in Secondary Education (193). Apart from these types of schools, there is also a significant number representing various types of schools (sports, vocational schools, arts and culture, high-schools with specialised classes etc.)

Most of the respondents were aged from 35 to 45 and 45 to 55, rising altogether to more than 75% from these age groups), while teachers below 35 were only 8,56% and teachers above 55 were 13,57%.

The majority of the teachers (actually more than 80% altogether) reported 10 or more years of teaching experience, forming thus a quite experienced community of teachers.

Our last descriptive profile diagram shows the experience of the interviewees as class teachers and it varies a lot – from 0 up to 29 years of

experience. There are some peaks (like 10 or 20 years) which could be explained with the fact that most teachers do not keep precise track of their professional career and prefer to round the figures, however what is seen also is that only 12% of the total participating teachers have no experience as a class teacher, which is serious indicator that the participating teachers have sound administrative expertise and (quite likely) contacts with parents, so their answers should be quite relevant with the survey targets.



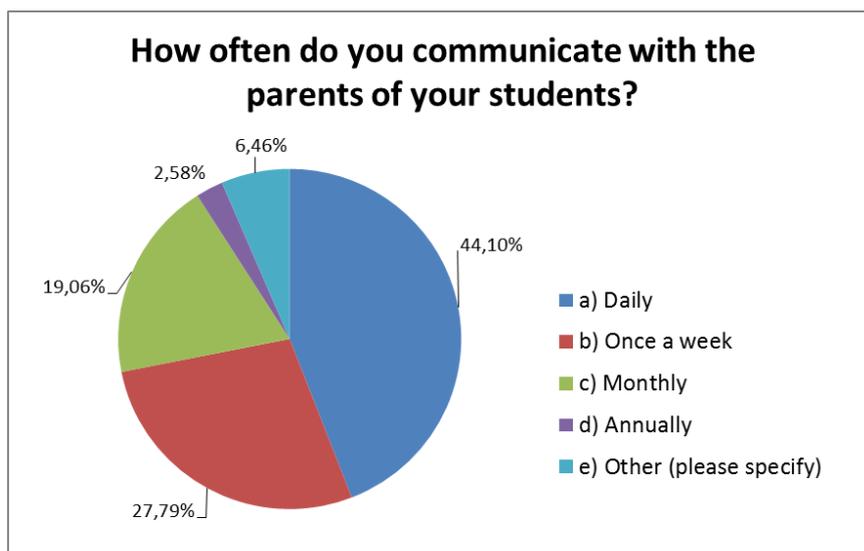
**Figure 10 Teaching experience of Bulgarian teachers**

## Results

The questions were intended both to identify the current situation regarding use of ICT in the school, the forms of interaction between teachers and students, and also the prevailing culture and readiness of the teachers to communicate with parents using new technologies, as well as their perceived potential for strengthening the relations between school and family.

A first positive indicator was that most teachers reported that they internet access at home (presumably they have computers at home as well): out of 619, only 5 teachers (less than 1%) reported that they had no internet access at home. This also supports the result of the Bulgarian school principals' survey, which also showed very high percentages of teachers' internet access at home.

A very high number of teachers (around 94%) expressed a positive attitude towards the potential of using new technologies in communicating with parents, while a very small percentage (3,72%) had not formed a certain attitude.

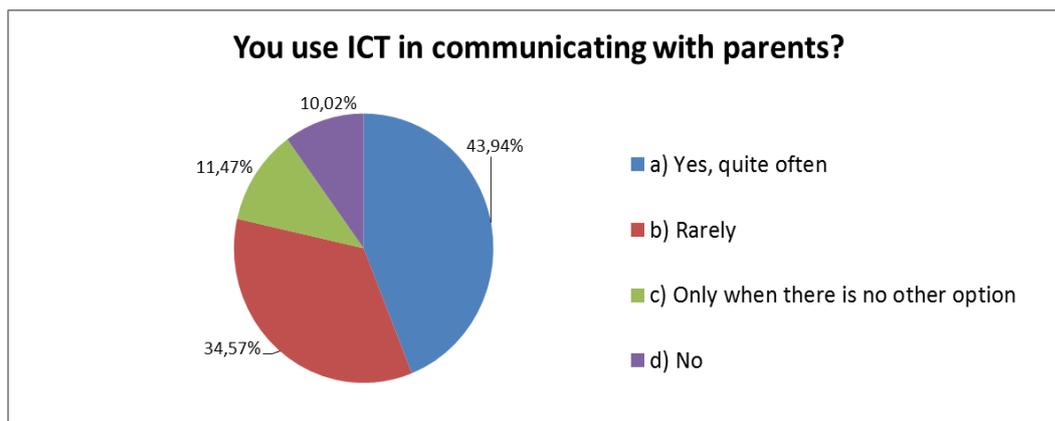


**Figure 11 Frequency of communication with parents**

In terms of frequency of communication with parents (regardless of means/ tools used), 44% of the respondents stated that they communicate on a daily basis and 28% every week. Nineteen per cent reported that they communicate with parents every month and only less than 2% once a year. There is not sufficient data here on whether this follows an established communication mechanism, formed by the school, and whether these percentages of frequency respond to groups of parents or individual parents. Other responses provided by the participants included "few times a week", "when needed", "depends on the student", "during PTA meetings", "I am a class teacher and often meet parents", or even "I am teacher in an evening school and never meet parents" etc.

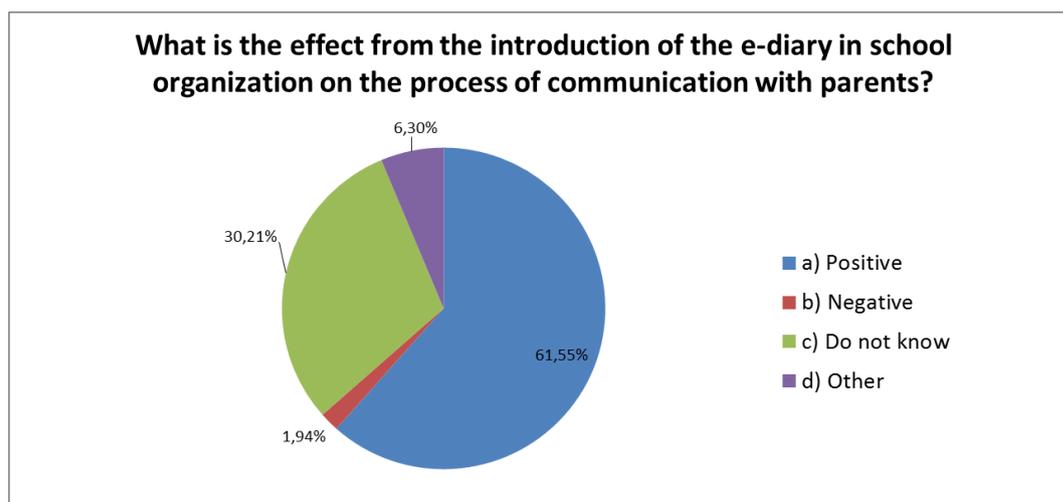
Using ICT to assign homework seemed to be quite popular, and was practiced by 70% of the teachers. Regarding the use of ICT to interact with parents,

Surprisingly the opinions looks quite balanced when interpreting similar question regarding ICT interaction with parents, the biggest percentage stated that they used it quite often (43,94), although the difference from the group that used it rarely was not great (34,6%). There was also a total of approximately 20% of teachers who either used ICT to communicate with parents when there was no other option, or who would not use it at all.



**Figure 12 Teachers' use of ICT to communicate with the parents**

The question of using the e-diary tool to communicate with parents, which was posed also in the principals' survey and had been implemented in Bulgarian schools, here again received positive responses from 60% of the teachers, who consider it to have positive impact, while

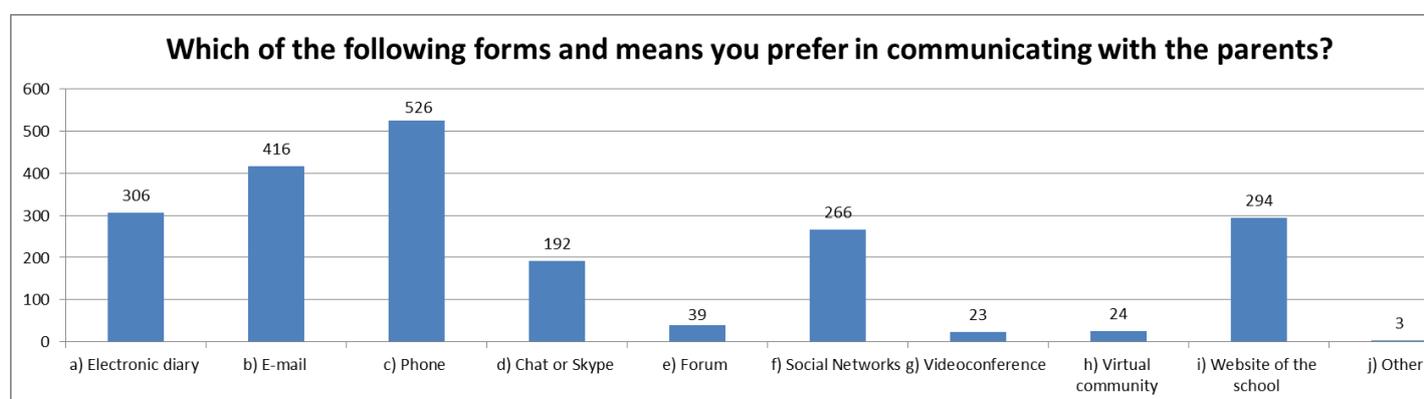


**Figure 13 Impact of the e-diary tool on communicating with the parents**

only less than 2% were negative. The high percentage of teachers who could not form an opinion (30,2%) could be coming from schools where the e-diary practice had not yet been

implemented. Among the 6% of respondents who chose the „Other” option, the most typical ones, like in the Bulgarian principals’ survey focused on parents’ lack of internet accessibility, lack of interest in getting engaged and physical proximity with the parents in small communities, which make such online communication practices to be considered unnecessary.

In terms of the preferred tools for communication with pupils’ parents, once again, like in the Bulgarian principals’ survey, the phone was the most preferred one, followed e-mail and e-diary, which received here higher scores than from the school principals. A significant number of teachers (266) use also social networks to communicate with parents, while virtual communities, forum, videoconferencing are still not so popular (Fig. 24).



**Figure 14 Teachers' preferred tools for communicating with pupils' parents**

The participants were also asked if they would be willing to hold a virtual meeting with pupils’ parents, receiving positive responses from 53,8%, uncertain (“Don’t know”) from almost one fourth of the respondents and negative from almost 20%. It is quite positive indicator that more than half of the participants have answered positively to the question „Would you held a virtual PTA meeting?” while less than 20% are not prepared for that. The reasons provided for the negative responses included again “parents’ poor ICT literacy”, “only in case of emergency”, “still nothing could replace real face-to-face contact” .

In terms of readiness for communicating with the parents through ICT, more than two thirds of the teachers responded that they need specific training, while less than 15% think that such training is not necessary. The rest vary but more or less they tend to gravitate towards „maybe it is necessary, but not for every teacher”.

Finally, the results on the question of the perceived potential of specific e-tools to improve communication with parents, illustrated in Fig. 25, seem to support most of the results on the preferred tools, previously presented. Phone and e-mail are again reported as the tools considered to be most efficient, while the social networking tools also hold an important position. Blogs, chat rooms/ Skype and forums are here again, alike in the principals’ survey, not considered particularly efficient.

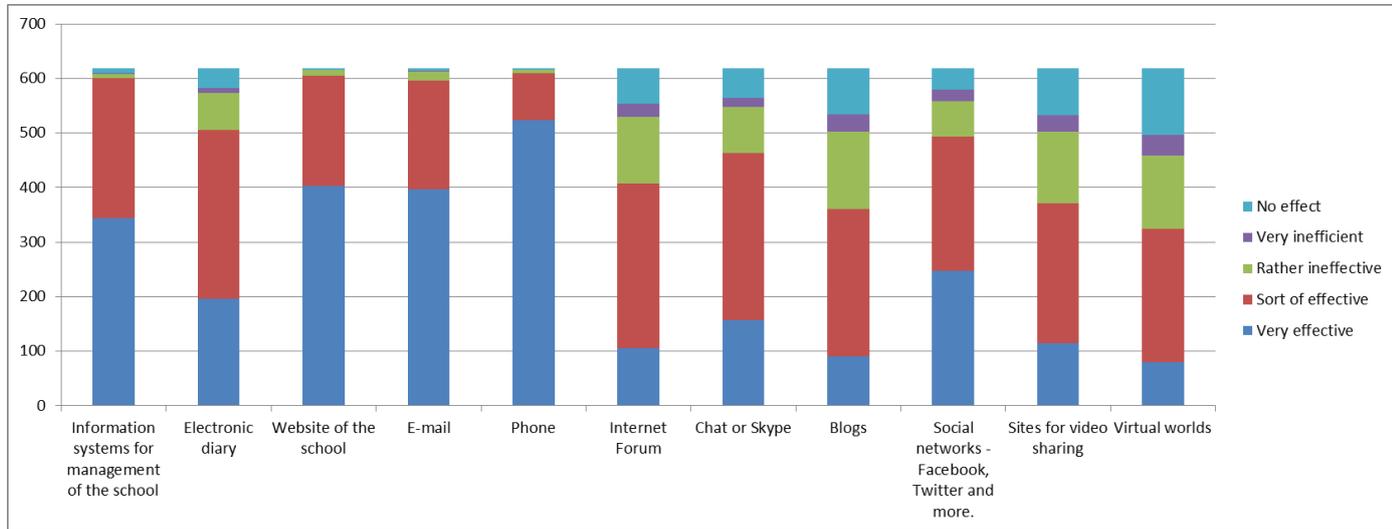


Figure 15 Perceived potential of e-tools to improve communication with parents

### 3 Appendix I: School leaders' survey (Bulgaria)

*This survey is to examine the views of heads of educational establishments for opportunities to use information and communication technologies (ICT) in the process of communication with parents. The survey is anonymous, and although you have logged in your account will not serve us to collect personal information, but should orient us about trends and accordingly if in the future be published somewhere, there will be no references to the people that submitted the information. Please answer each question by choosing the answer that most resembles your own opinion. If you select the option "Other" please specify what you mean. Thanks for your time and assistance!*

**1. What type of school you manage?**

- a) Elementary School
- b) Primary School
- c) Secondary School
- d) Other

**2. Are you aware how many of the families of your students use internet?**

- a) No one
- b) Some (less than 25%)
- c) More than 25% but less than 75%
- d) More than 75%
- e) I have no such information

**3. Are you aware how many of the teachers at your school have internet access in their homes?**

- a) No one
- b) Some (less than 25%)
- c) More than 25% but less than 75%
- d) More than 75%
- e) I have no such information

**4. Does the school have developed a policy or strategy for ICT implementation in the learning process and / or management of the school?**

- a) Yes
- b) No
- c) Other

**5. Do you think that new technologies can be useful in communicating with parents?**

- a) Yes
- b) No
- c) Other

**6. What is your opinion about online communication with parents?**

- a) Support it
- b) Do not support
- c) Do not know
- d) Other

**7. What information systems (IS) management of the school use?**

- a) IS AdminPro / L
- b) IS Ciela Education
- c) Expert Vision Student Information System
- d) Other
- e) Do not use information system

**8. Does the usage of management information system help you realize a better e-administration in the school organization?**

- a) Yes
- b) No
- c) Do not know
- d) Other

**9. What impact could be the introduction of the electronic diary in school organization on the process of communication with parents?**

- a) Positive
- b) Negative
- c) Do not know
- d) Other

**10. Which new forms you use for managing interactions between school and family? (You can mark more than one answer)**

- a) The school website
- b) Electronic diary
- c) E-mail



- d) Virtual consultations via chat or Skype
- e) Specialized forum for parents.
- f) Social Networks
- g) Other

**11. Which are the main advantages of ICT in school management? (You can mark more than one answer).**

- a) Improved operability and speed in obtaining and processing information;
- b) Reduce the time for decision-making
- c) Permit the introduction of new forms of information, new forms of classes, new forms of communication with parents
- d) Expand implementing marketing and advertising approach in education;
- e) Activates and improves the methodical work of teachers on the basis of the construction of virtual social professional networks
- f) Activates conditions for the introduction of e-procedures to ensure and maintain quality education
- g) Other

**12. Are there established mechanisms for control and monitoring of safe work in the school computer network and the Internet?**

- a) Yes
- b) No
- c) Other

**13. What are the barriers that prevent the use of ICT as a form of communication with parents? (You can mark more than one answer)**

- a) Lack of ICT knowledge
- b) Lack of Internet access and / or insufficient technological facilities
- c) Lack of interest or motivation for communication through ICT
- d) Inadequate training of pedagogical staff in the field of digital competences
- e) Other

**14. How do you evaluate the potential of e-tools to improve efficiency in the management of the interaction between school and family?**

e-tools	Very effective	Sort of effective	Rather ineffective	Very inefficient	No effect
Information systems for	<input type="radio"/>				



management of the school					
Electronic diary	<input type="radio"/>				
Website of the school	<input type="radio"/>				
E-mail	<input type="radio"/>				
Phone	<input type="radio"/>				
Internet Forum	<input type="radio"/>				
Chat or Skype	<input type="radio"/>				
Blogs	<input type="radio"/>				
Social networks - Facebook, Twitter and more.	<input type="radio"/>				
Sites for video sharing	<input type="radio"/>				
Virtual worlds	<input type="radio"/>				

**15. Please note:**

a) your gender:  m  f

b) age:  to 35 years  from 35 to 45 years  from 45 to 55 years  55 and above

c) experience as a school principal (in years):

## 4 Appendix II: Teachers' survey (Bulgaria)

*This survey is conducted for scientific purposes and to examine the views of teachers on the use of information and communication technologies (ICT) as a form of communication with parents to set homework, online assessment and self-assessment. The survey is anonymous. Please answer each question by choosing the answer that most resembles your own opinion. If you select "Other" questions that allow specify what you mean. Thank you in advance for your time and assistance!*

### 1. How often do you communicate with the parents of your students?

- a) Daily  
 b) Once a week  
 c) Monthly  
 d) Annually  
 e) Other (please specify)

### 2a. Do you think that new technologies can be useful in communicating with parents?

- a) Yes  
 b) No  
 c) Do not know  
 d) Other (please specify)

### 2b. Do you use ICT to set homework, online assessment and self-assessment?

- a) Yes, I use it for   
 b) No

### 3. You use ICT in communicating with parents?

- a) Yes, quite often  
 b) Rarely  
 c) Only when there is no other option  
 d) No

### 4. What do you think is the best use of the school website? (You can mark more than one answer).

- a) Advertising and image of the school  
 b) Ability to share teaching experience  
 c) The means of communication with parents  
 d) You don't need it  
 e) Other

**5. What is the effect from the introduction of the e-diary in school organization on the process of communication with parents?**

- a) Positive
- b) Negative
- c) Do not know
- d) Other

**6. Which of the following forms and means you prefer in communicating with the parents? (You can mark more than one answer).**

- a) Electronic diary
- b) E-mail
- c) Phone
- d) Chat or Skype
- e) Forum
- f) Social Networks
- g) Videoconference
- h) Virtual community
- i) Website of the school
- j) Other

**7. What is your most used method to inform parents on various issues that are important to their children's education? (You can mark more than one answer).**

- a) Posting messages on the school website
- b) Electronic diary
- c) Phone
- d) E-mail
- e) Chat or Skype
- f) Forum
- g) Social Networks
- h) Videoconference
- i) Virtual community
- j) The parent meeting (joint / individual)
- k) Through notes and messages on paper
- l) Other



**8. Would you held a virtual PTA meeting?**

- a) Yes
- b) No
- c) Do not know
- d) Other

**9. Specify the difficulties encountered in the process of communication with the use of ICT?**

**10. Is further training of teachers for effective use of ICT in the process of communicating with parents necessary?**

**11. How do you evaluate the potential of e-tools to improve the efficiency in the management of the interaction between school and family?**

e-tools	Very effective	Sort of effective	Rather ineffective	Very inefficient	No effect
Information systems for management of the school	<input type="radio"/>				
Electronic diary	<input type="radio"/>				
Website of the school	<input type="radio"/>				
E-mail	<input type="radio"/>				
Phone	<input type="radio"/>				
Internet Forum	<input type="radio"/>				
Chat or Skype	<input type="radio"/>				
Blogs	<input type="radio"/>				
Social networks - Facebook, Twitter and more.	<input type="radio"/>				
Sites for video sharing	<input type="radio"/>				
Virtual worlds	<input type="radio"/>				

**12. You have Internet access at home?**

- a) Yes
- b) No

c) Other

**13. Your school is? (Please fill in what city / village is located in the section Other)**

- a) Elementary School
- b) Primary School
- c) Secondary School
- d) Other

**14. In which stage of education you teach?**

- a) Initial stage
- b) Lower secondary
- c) High School

**15. Please note:**

- a) your gender:  m  f
- b) age:  to 35 years  from 35 to 45 years  from 45 to 55 years  55 and above
- c) teaching experience:  up to 5 years  from 5 to 10  10 to 20  over 20 years
- d) experience as a class teacher (if you have):