International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2015, Vol. 11, Issue 3, pp. 65-81

Digital channels in teacher-parent communication: The case of Estonia

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ABSTRACT

The aim of this paper is to analyse the attitudes of Estonian primary school teachers and parents regarding the role of teacher-parent digital communication in socialising the child and in the child's academic progress, their communication channel preferences, and related experiences and opinions. The main starting points are Bronfenbrenner's (1979) ecological systems' theory and Epstein's (2011) theory of overlapping spheres of influence. The empirical basis is 12 focus group interviews conducted in 2012 in six Estonian schools with teachers (n=44) and parents (n=39). The focus groups indicated the consensus among teachers and parents regarding the necessity of overlapping interests and spheres of influence of home and school for the development of the child. The research highlights differences in channel preferences by types of school and between teachers and parents of the same school, indicating the need to find ways to harmonise communication conventions. In addition to the opportunities and benefits of written digital interaction, digital channels incur problems and communication failures (e.g. misunderstandings, digital footprint, and insufficient digital competence).

Keywords: *digital communication channels; teacher-parent communication; academic progress; socialisation; overlapping spheres of influence*

INTRODUCTION

The fast development of information technology creates an opportunity for all parties connected with school to interact through various media, take active part in information exchange, and communicate on a personal as well as on an institutional level (Tidwell & Walther 2002). Communication creates a social system which forms a network supporting the child (Bronfenbrenner 1979). Research has shown that the communication between parents, teachers and the community (other family members, caretakers, supporting teachers, social workers, etc.) plays an important role in the academic progress and socialisation of students in primary as well as secondary school (Christenson & Sheridan 2001; Jennings & Wartella 2004; Telem & Pinto 2006).

Digitisation and the fast development of the Internet has increased the importance of digital channels such as e-mail, instant and text messages, and social networking sites and other online platforms in the communication between parties connected with school. Alongside these, traditional channels such as personal conversations, phone calls and filling the diary continue being used to a large extent. This study takes its point of departure in Epstein's (2011) statement that communication between partners becomes more efficient when the overlap of communication channel preferences is as big as possible, creating the prerequisites for overlapping spheres of influence to support students' academic progress and socialisation. In line with Epstein (2011), we view academic progress and socialisation as conceptually distinct but closely related processes, particularly so in primary school teacher-parent communication where information about the child's study results is often intertwined with comments on the child's behaviour, emotions, etc.

In Estonia, developments in information and communication technology have been crucial in the

transition from post-communism to the information society, and 'internetization' has become one of the central symbols of the rapidly changing society (Runnel, Pruulmann-Vengerfeldt & Reinsalu 2009). Super-high-speed development of digital communication has many advantages, but it also comes with problems, fears and conflicts. On one hand, nearly all technological opportunities have been created in Estonia for extensive and efficient digital communication between school and home. For instance, students, teachers and parents make a very active use of a specific online educational information environment called *e-School* that provides up-to-date study-related information (timetables, lesson descriptions, home assignments, study resources, grades and absences) and brings the students, their families, schools, and school supervisors together into a connected learning community (eKool 2015). On the other hand, the rapid development has led to digital stratification – differing opportunities and ways of using digital technology, depending on age, education, income and social status (Kalmus, Talves & Pruulmann-Vengerfeldt 2013), which is also expected to influence the communication between teachers, parents and the community.

The aim of this paper is to analyse the preferences of Estonian primary school teachers and parents regarding teacher-parent communication channels, including digital channels, and the experiences and attitudes connected therewith. The article seeks for an answer to two research questions:

RQ1: How do teachers and parents perceive and understand the necessity of teacher-parent communication and its possible impact on the socialisation and academic progress of a child?

RQ2: Which communication channels (including digital media) do teachers and parents prefer and avoid, and with which considerations and goals?

THEORETICAL AND EMPIRICAL FRAMEWORK

Role of school-home communication in supporting child development and socialisation

Socialisation is a process during which individuals adapt to and adopt the norms, values, traditions and behavioural patterns of their social group (Lutfey & Mortimer 2006). Several theoretical and empirical works (e.g. Handel, Cahill & Elkin 2007; LeVine 2003) have shown that socialisation takes place in the course of interactions between the child and the environment. Bronfenbrenner's (1979) ecological systems' theory of human development places the child in specific cycles which form various contexts of socialisation. The society impacts the child directly through contexts in which the child is placed (microsystems, i.e. the family and the class at school) and through contexts in which microsystems meet (mesosystems, or interactions between two microsystems, incl. the parent and the teacher), as well as through exosystems (the external environment which impacts the development of a child indirectly – through school and the parents' workplace). The socio-cultural context (macrosystem) is also important.

Primary socialisation takes place mainly within the family (Grusec 2011), which influences children's understanding of education and thereby also children's academic progress (Juang & Silbereisen 2002), their later achievements and career expectations (Hauser, Tsai & Sewell 1983). At schools, children are also socialised in the educational sense as well as in terms of developing career expectations, and this significantly influences the academic progress of children (Hallinan 2006; Stanton-Salazar & Spina 2000).

Homes and schools do not operate in isolation as socialisation factors, but in mutual interaction as well as in interaction with other contexts, which influence the development of a child, for example with the community at large (Bronfenbrenner 1986; Eccles at al. 1993). As a means of observing such interaction, we use Epstein's (2011) theory of overlapping spheres of influence. According to the main statement by Epstein, the combined effect of the school, home and community is important for the

development of a child, because communication between those spheres enables to create the most optimal environment for development, in which all parties contribute joint effort to support the student's academic progress and their social development. The external structure of Epstein's model is formed by conditions and important forces (e.g. the developmental characteristics of the family, school and students, historical and political contexts). Epstein emphasises that these forces create the conditions, space, opportunities and initiatives for more or less shared activities in the school, family and community. The internal structure of the model determines institutional and individual communication channels and/or the location where the social interaction of participants takes place.

As the communication between school and home enables to get and give feedback, this makes the impact of overlapping spheres of influence on the student's development more efficient and thereby supports the child's socialisation (Griffith 1996; Taylor & Pearson 2004; Zellmann & Waterman1998), also being important for the school as a whole (Epstein 2011). Based on literature, we can claim that in general, the communication between the teacher and the parent takes place as an interaction between two discourses – exchange of information about the child's academic and social development, and partnership – which presumes active communication between parents and teachers. Partnership means that the family, school and community have an equal role and joint responsibility for students' education and development (Brandt et al. 2014), which is considered an important supporting factor of children's academic progress (Desforges & Abouchaar 2003; Epstein 2011; Fan & Chen 2001; Harris & Goodall 2008; Hill & Tyson 2009; Hoagwood 2005; Jeynes 2005). Communication and cooperation between school and home is useful for teachers' practices and pedagogical atmosphere, and teachers can better focus their work (Oostdam & Hooge 2013). Overlapping spheres of influence are extended by reaching an agreement on school-home communication channels, including digital channels, which allows understanding the child's needs and ensuring bigger teacher and parent support for the child (Lunts 2003).

Advantages and challenges of digital communication

The fast development of digital technology significantly impacts the interaction of school and home as well as socialisation of a child, involving positive opportunities as well as risks and challenges. On one hand, using digital channels enables fast and relevant information exchange, allowing a parent to immediately catch up on the child's academic progress. Therefore, technology allows for time-efficient interaction between teacher and parent and if necessary, involving both the parents and the community at large all at once (Ramirez 2001). New technological opportunities support the interaction between school and home, making the relationship more open and transparent, and thereby positively impacting parents' attitudes and opportunities to take part in the child's academic progress (Bauch 1998). According to Thompson (2008), information technology has made the teacher-parent interaction more frequent and effective, because the teacher is more available to the parent. For example, an important place in school-home communication is now occupied by e-mail, which does not depend on the location of partners and allows timing long dialogues based on the availability of time resources.

Digital communication also has its shortcomings. Usage of digital tools in school-home communication may hinder interpersonal communication and information exchange (Olmstead 2013; Telem & Pinto 2006). Using digital channels may come with communication problems and fears, such as the fear of the digital footprint – recorded interaction in online environments, such as e-school entries, e-mails, instant messages – which, in turn, raises the question of ethics in digital communication (Williams 2007). Fears connected with digital communication may damage the relationship between school and home and hinder the creation of overlapping spheres of influence and their functioning through digital channels. This, in turn, may negatively impact the functioning of the child at school in terms of academic and social success (Lee et al. 2011; Olmstead 2013; Tidwell & Walther 2002).

In addition, the development of digital technology comes with a series of problematic phenomena in the space and time organisation of the society and education. New technologies enable constant connectivity, which results in partial collapse of boundaries between public and private, and between work and leisure (Agger 2011). In the context of school-home interaction, this may mean bigger perceived control (especially over the teacher's activities) and the increasing deficit of the teacher's personal time, which may come with the risk of burnout.

The acceleration of social and personal time – changes and processes taking place at increasingly growing speed, and its subjective perception –, connected with the fast development of digital technology, also influences the relationships between generations (Rosa 2005) and thereby socialisation. Several authors (e.g. Livingstone 2009; Tapscott 1998) have highlighted significant changes in the power dynamic between adults and children in traditional institutions such as family and school: the authority on a central innovation (ICT) is shared between children and adults more than in the past. To cope successfully with the increasing importance of peers and the media as agents of socialisation (Kalmus 2007), both teachers and parents must show increasing effort to synchronise the socialisation processes with fast technological and social changes. Agreements between teachers and parents regarding the use of digital communication channels are also important for socialisation, presuming mutual trust and adherence to communication ethics, but also the uniformity of the level of teachers' and parents' digital competence.

Estonian parents' and teachers' digital competence

One of the main indicators of the development of the information society is the ratio of Internet users in the population and the proportion of daily users in Internet users. To provide internationally comparable empirical background, we use data from the representative survey EU Kids Online, which studied 9–16 year-old Internet users and one of their parents in 25 European countries (N=25142; in Estonia N=1005; see Livingstone et al. 2011).

Together with other new EU member states, Estonia belongs to the group of countries where parents are less frequent Internet users compared to the children: the share of Internet users among the parents of Internet-using children aged 9–16 was 93% in 2010 (the parents' average age was 40 years). While a single day did not pass without entering the cyberspace for 82% of Estonian children, only 69% of their parents used the Internet daily (Kalmus 2013).

The majority (95%) of Estonian parents who use the Internet surf the net at home, 45% of them (also) do it at work or in an educational institution. In 2010, only 7% of parents used the Internet with a mobile phone or smartphone.

A little over a half (53%) of Estonian parents considered themselves to be fairly or very experienced Internet users, 35% considered themselves to be fairly inexperienced, and 5% to be completely inexperienced. The average indicators of the 25 surveyed European countries were 59%, 14%, and 2%, respectively. Thus, the self-assessed online skills of Estonian parents are somewhat below the European level.

From the perspective of socialisation, the social mediation of children's Internet use by parents and teachers – their help and guidance as well as rules and restrictions – is important. In this regard, Estonian parents are relatively passive compared to other countries – similarly to several Eastern European countries (for example, Lithuania and Slovenia), the frequency of parental instructions and restrictions remains below the European average (Kalmus 2013). At the same time, Estonian teachers place a little over the European average when it comes to mediating children's Internet use: 87% of Estonian children claimed that some of the teachers had instructed them about the Internet at

least in one way out of eight (the European average was 81%). Estonian teachers' relatively advanced ICT skills in the European context have been evidenced by other studies: Estonia belongs to the group of countries where the highest proportion (between 30-50% of students at grade 4 and/or grade 8) are taught by digitally confident and supportive teachers (Survey of Schools 2013). These findings, however, imply that considerable variety in Estonian teachers' digital competence exists.

A noteworthy fact about home-school communication is that a quarter of Estonian parents had received information and advice about safer use of the Internet from their child's school; an entire third of parents would also like to receive this kind of information from the school in the future.

To sum up, there is room for improvement in the digital competence of Estonian parents as well as in cooperation between school and home for promoting children's safer Internet use and awareness of all parties. This is the context for our study of Estonian teachers' and parents' preferences of digital communication channels and the related attitudes.

METHOD

The data collection method was a semi-structured focus group interview. The method enables to obtain meaningful material about experiences and opinions of participants, and similar as well as different experiences and opinions may enhance interaction and delving into the topic (Patton 2002). According to Patton (2002), focus groups usually involve 6 to 8 participants. We conducted 12 focus groups, the size of which ranged from 6 to 9 (see Table 1 below). The language of the interviews was Estonian, the participants' mother tongue. This, together with the small group setting, enabled all participants to voice their opinion at ease. The focus groups provided ample material despite some disadvantages (time limits, participants' mutual influence, and occasional deviations from the topic of discussion).

Sample

The sample consists of primary school teachers from six schools (n=44) and the parents of primary school students of the same schools (n=39). The schools were selected with a strategic aim to represent small schools (up to 200 students), medium-sized schools (up to 500 students) and big schools (over 500 students), and city and country schools in varying geographical locations of Estonia. As all Estonian schools are technologically well-equipped, the school's ICT-support level was not considered a relevant sampling criterion.

The consent of the school management was achieved for forming focus groups. At all schools, the teacher who performed the additional duties of a study coordinator of primary school helped forward the invitation to take part in the study to teachers, asking class teachers to send parents the invitation to participate in the focus group.

All focus groups were carried out at schools. At four of the schools the teacher and parent groups took place on the same day, with a few hours in between. At two schools, teachers and parents assembled on separate days. The six teacher focus groups consisted of women aged 23-69. The six parent focus groups consisted of 35 women and 4 men aged 25-55.

Participants were, first, instructed to recall situations and problems that required communication with teachers / parents. Secondly, participants were asked to discuss the characteristics of the communication channels used.

The analysis procedure

The discussions of the focus groups were moderated, audio-recorded and transcribed by the first author who is a trained and experienced researcher. Quotes are referred to with codes (e.g. T3.2), in which the letters T and P refer to the groups of teachers and parents, respectively; the first code number signifies the focus group; and the second code number refers to the participant in the group. Interviews lasted for 1.45–2 hours. The transcriptions cover 279 pages in total.

The structure of questions in focus group interviews enabled the participants to move from general to specific topics. To answer the research questions of this paper we analyse two sets of interview questions:

RQ1 [*How do teachers and parents perceive and understand the necessity of teacher-parent communication and its possible impact on the socialisation and academic progress of a child?*] is addressed by analysing the answers to the interview questions: *What is your opinion of the necessity of communication between the teacher and parent in primary school? What influence could digital communication between teacher and parent have on the socialisation and academic progress of a child?*

RQ2 [*Which communication channels (including digital media) do teachers and parents prefer and avoid, and with which considerations and goals?*] is answered by focussing on the interview questions: *What communication channels can you use when interacting with parents / teachers? Which ones do you prefer? Which digital tools / digital channels do you prefer? Why?*
The empirical material was categorised by subtopics and analysed according to the principles of qualitative comparative content analysis (Boeije 2002), by inductively deriving groups of codes from the text and analysing them descriptively. Throughout the whole coding process the authors used multiple iterations in creating categories and inter-coder verification (only the codes that both authors agreed upon were retained) to ensure transparency and reliability of coding.

All interviews were systematically processed by subtopics to notice similar understandings and opinions as well as differing or conflicting statements at the very start of the coding process. The coding unit was an utterance, which was coded as a sentence summarising or characterising the meaning of the utterance. In following Mayring (2000), the codes within the same subtopic were later recoded on a more abstract level. After this, all focus group interviews were compared and the recurring patterns and subtopics were marked for further analysis, for example: “agreements on communication”, “choice of digital channel depending on the communication partner”, “fear of digital tools”, “inability to write the ‘right’ text”, “time-consuming writing of an e-mail”, “e-school as the aid of a parent”.

RESULTS

Teachers’ and parents’ understandings of the role and necessity of school-home communication

All parents and teachers in our study considered school-home communication to be important, and emphasised its role in socialising the child and in the child’s academic progress. Parents primarily saw regular school-home communication as constant and adequate feedback to the child’s success at school; in addition, they believed that the school needs information from parents in particular areas inaccessible to teachers (e.g. issues at home, health and development problems).

> *Interaction between the teacher and parent influences the child's adaptation, but also whether the child still wants to go to school, whether they feel good there, whether they want to study, and especially if the child has had some sort of big developmental issues… (P4.4)*

Teachers believed that regular and fast information exchange between the school and home helps the child adapt to school and get used to the demands and rules. In addition, teachers considered communication with parents to be an important support for parents in the child's academic development and socialisation.

> *Some parents may be very strict, and this is where it's particularly important to get information from the teacher which praises and supports the child, and later they [parents] will try it themselves (T9.1).*

Teachers and parents considered it to be important that at school, children's better behavioural habits were reinforced, shortcomings in the child's development were noticed and the parents were informed of this, so that they could support the child and seek help if necessary.

These results show that teachers and parents value school-home communication highly, including its role in supporting proactive participation in raising the child to notice and prevent problems. Next, we will observe to what extent the actual resources and conditions (e.g. temporal or physical distance) and the attitudes and preferences concerning communication channels promote parent-teacher interaction.

Teachers' and parents' communication channel preferences

Table 1 shows the types of schools involved in the study, the number of participants in focus groups and the order of their channel preferences. The interviewer asked all participants to provide the ranking of their channel preferences: *You mentioned different channels that you have used to communicate with teachers / parents. You have listed e-School, e-mails, Skype, blogs, diary, face-to-face meetings, phone calls, SMS and Facebook. Among these please specify three channels that you use most often, and give reasons why*. In the analysis, individual participants' channel preferences were added up to find the overall ranking list of the focus group.

The table provides three or four preferences by focus group, depending on how many channels the participants listed as their preference.

Table 1: *Teachers' and parents' communication channel preferences*

Size of school	Location	Target group	Number of participants	Focus group code	Channel preferences			
					1st	2nd	3rd	4th
Big	City	Teachers	8	T3	face-to-face	e-mail	e-school	
		Parents	6	P4	e-school	e-mail	face-to-face	
	Country	Teachers	9	T7	e-mail	diary	e-school	
		Parents	8	P8	calling	SMS	face-to-face	
Medium	City	Teachers	6	T1	calling	SMS	diary	e-mail
		Parents	6	P2	e-school	face-to-face	calling	e-mail
	Country	Teachers	6	T5	e-school	diary	e-mail	
		Parents	6	P6	SMS	calling	e-school	face-to-face
Small	City	Teachers	8	T12	calling	e-school	diary	e-mail
		Parents	7	P11	face-to-face	e-school	calling	
	Country	Teachers	7	T9	calling	diary	e-mail	
		Parents	6	P10	SMS	e-school	calling	

The analysis of channel preferences shows that in city schools, two or three channel preferences of teachers and parents overlapped, whereas in country schools there was one commonality or none at all.

The extent of overlapping channel preferences

The big city school is the only one where all channel preferences of teachers and parents overlapped (including two digital channels), even though the order of preferences varied a little. The teachers' first preference was meeting in person, whereas the parents favoured e-school ("… *for everyday purposes, we obviously use e-school*"; P4.1).

In the medium-sized and small city schools, two channel preferences of teachers and parents overlapped (calling and e-mail; calling and e-school, respectively), but the order of preferences varied. The teachers of the medium and small city schools favoured calling ("… *definitely phone, this ensures a result*"; T12.8). Parents of a medium-sized city school preferred e-school first and foremost, while parents of a small city school preferred meeting in person.

In the small city school, an odd conflict appeared: teachers mentioned digital channels among their preferences, but reckoned that the traditional paper diary could be the preference of present-day parents:

> *… many of the parents today belong to the generation for whom the diary was most important. Today too, everything that is written in the diary reaches the parent, while things written in e-school often do not (T12.8).*

Interestingly, parents of the same school placed the teachers' opinion of e-school under doubt: "*I have realized that the teachers themselves are not really fans of e-school*" (P11.7).

One of the teacher-parent channel preferences overlapped in the medium and small country schools: e-school in the medium-sized country school, and calling in the small country school (which was also the first channel preference of the teachers of the respective schools). However, the first preference of parents of both schools was SMS ("… *you just text them - the fastest and easiest way*"; P6.7).

The small country school is the only school type where meeting face-to-face was not mentioned as a channel preference. According to parents, the physical and temporal distance is a preventing factor: "… *I don't get home from work before the school closes*" (P10.1).

Teachers and parents of a big country school had no overlapping channel preferences. The teachers' first preference was e-mail: "… *I prefer to interact by e-mail, it's fast and definite*" (T7.2); the parents preferred calling: "… *I prefer to call because this is the fastest way to get information*" (P8.8).

The results indicate that in no school does the first channel preference of teachers and parents overlap, which may render dialogic communication more difficult. This is also not improved by the fact that in five teacher focus groups, one of the preferences mentioned was the traditional paper diary, which primarily enables one-way communication, and was missing in the list of preferred channels of all parent focus groups.

Factors influencing the selection of communication channels

In real communicative situations, the selection of a communication channel often appeared to be flexible, depending on the context and purpose. For example, the discussion of parents of a small country school revealed that their choice of a communication channel does not matter, because teachers always try to react. This opinion matches the discussion of the teacher focus group of the same school. Both focus groups of the big city school revealed that the suitable communication channel depends on the situation:

> *E-mails are of general sort, when you need to give overviews and information. When there are positive developments, you write about it in e-school, and when something really nice has happened, you also write a personal e-mail to someone's mum or dad. But when there is an issue or problem, face-to-face is the best option (T3.1).*

Analysis by individuals revealed that most of the teachers are prepared to communicate through the channel chosen by the parent: "*Now I am in the stage of texting with a parent, this is what they wanted*" (T12.4), while some others prefer to tell the parents which communication channel to use:

> *I use the diary most often and the e-mail least often. Why? Because I agreed with the parents this way and this just works for me (T1.4).*

Parents generally use the channel selected by the teacher when the teacher initiates the interaction: "*We talk face-to-face a lot; the teacher wants it this way*" (P4.5). When the parent starts the interaction, they generally choose the communication channel most suitable for them:

> *I generally use the phone, it's the fastest, and you can also be more confident that nothing of the communication gets lost (P8.6).*

The preferences of each focus group included at least two digital channels, even though sometimes they were not the first preference. Teachers and parents mentioned e-school, e-mail and the mobile phone (SMS and calling) as the most suitable digital channels. Parents also discussed the use of Facebook and Skype but perceived this as boundary infringement: "… *it's not like I will become best buddies with the teacher*" (P6.6), or presumed conditions of privacy: "*It takes a private place to use Skype*" (P11.7). At the same time, several parents said that they use Skype to discuss with other parents problems between children (P10.3).

Next, we will take a closer look at experiences, attitudes and fears connected with three of the most preferred digital channels – e-school, e-mail and mobile phone.

Advantages and disadvantages of digital channels

E-school

E-school gathered many different opinions, the majority of which were positive. Teachers believed that this digital channel gives them better opportunities to manage their time in doing their work (also at home after the end of the school day if necessary), and the parents get constant access to information concerning the child's studies.

> *For example, as a class teacher, I can read about the overall situation of my class, the absences and behaviour, also at weekends /…/ and make plans and summaries (T12.7).*

Teachers also appreciated the opportunity that parents' participation or lack thereof in children's studies can be consistently analysed on the basis of e-school visiting activity to find additional opportunities to make cooperation with parents more effective.

> *… I keep an eye on use activity /…/ I will see that a parent logged in early in the morning, and they do keep checking throughout the day (T9.6).*

Teachers also believed that e-school is an environment which supports studies for those "*who did not pay enough attention in class*" (T7.4). This opinion was also shared by parents who found specifying descriptions of study materials on e-school to be important (also for those who were absent).

Furthermore, parents emphasised that e-school gives them the opportunity to watch the child's academic progress and to discuss school matters with the child.

The interviewed teachers also highlighted the opinion that e-school is very important for parents who are separated or work in another country, because it gives both parents the opportunity to stay involved in the child's school activities and react if necessary.

> *I have parents where one of them works somewhere abroad and stays more involved in the business than an average parent. And this is nothing but great (T5.5).*

Parents also highlighted various disadvantages of e-school (for example, decrease of personal interaction; removing the responsibility from children; the parents' getting information about the child's poor results immediately, without the child's explanations to the parent).

> *When it comes to e-school, I very much agree that it's, well, kind of a controlling body. /---/ And it seems to me that this e-school somewhat decreases the interaction in the family, like, between children, when it comes to studying (P8.5).*

E-mail

E-mail provides, according to the interviewed teachers and parents, broader opportunities to discuss problems concerning the child and constant dialogic communication.

> *If necessary, you can still solve problems and support the child through e-mail. With this parent, we've been writing every day for weeks already. I give them information and feedback about the kid's activities and things at school, and they, in turn, talk about what happened outside of school. In a word, the kid currently has problems with studies and we exchange e-mails so that the kid can get back on track (T12.4).*

When discussing e-mail in the context of time management, teachers also found that it was a good way to discuss problems after thinking them through, because parents who are busy with work can respond when they have the time, not when they are still emotional. However, this also includes an important conflict – several participants noted that the disadvantage of e-mails is not getting an immediate response. At the same time, some parents consider sending e-mails a sign of showing consideration for the teacher and their schedule.

> *This [sending e-mails] can be done at any time, it does not take the time away from the teacher at this given point, they'll read and respond when they can, whereas if you call them, they need to deal with you right away (P4.2).*

E-mail and e-school as channels of written digital communication

In summary, e-mail and e-school enable a very fast and effective information exchange between school and home. The advantage of written digital communication for teachers is also the security and feeling that the necessary information has been shared on time and it can be interpreted in the same way.

> *The big advantage of e-school is, after all, backing you up /.../ Hello, you have everything on e-school, this thing has to be done, this thing has to be clear, and that's it (T12.5).*
> *On a daily basis, I prefer the e-mail because I like things written down in black and white, so you'll just take it out, if there's been a problem or something (T7.5).*

On the negative side, written digital interaction takes time for both partners, because it presumes careful consideration of the content and format. In the case of written digital communication, teachers

and parents were not certain of the adequacy of receiving the message and mentioned the fear of being misunderstood:

> *… the thing with e-school is, you'll write a note there but you won't know how the mother understands it… Because the mother can read anything out of your words and actually you won't know how she'll react, calling is still more reliable (T9.5).*

> *I myself don't really like writing e-mails; this is actually something I do as a last resort. Since I'm not a very good writer, I fear that the other side will misunderstand me. It seems to me that what I wrote feels more angry and harsh than the things I say directly (P11.5).*

The analysis of focus group interviews revealed that the "digital footprint" was also considered a big disadvantage of written digital interaction (especially e-school) – the written word remains visible forever, any edits are visible for parents, and the information is also read by other school workers (e.g. the IT specialist and members of the management).

> *... I would not put personal information there [on e-school], I think that this is still a public thing and it'll stay written down there, I don't trust this kind of thing very much (P11.7).*

All teacher focus groups revealed that sometimes teachers lack the necessary skills to interact with parents (in writing) and to involve them. Several teachers described communication episodes, for which they had no skills to continue interacting with parents.

> *… parents are stuck in some sort of fears, some kind of prejudices which cause confusion and helplessness in me as well, and I won't know how to write (T7.1).*

Mobile phone

The mobile phone was used in most schools (except for the big city school) to share information between the teacher and parent swiftly, primarily with the assumption that the other party may not react to written contact immediately (or at all).

> *I won't send an e-mail because I don't know if the parent reads it and when they read it and if they bother to answer me at all (T12.7).*

Mobile texting was also used in school-home communication, and teachers considered it a fast and efficient communication tool, convenient for parents:

> *...we have these SMSs as well, which you can send, which is this information that goes straight to your pocket and is most effective when some sort of really urgent information /.../ needs to be forwarded (T1.5).*

The discussions revealed that teachers primarily text short information, which does not require a direct response (for example, notifying that a child is absent).

DISCUSSION AND CONCLUSIONS

The focus group interviews revealed that all teachers and parents who took part in the study considered communication, including digital communication, between school and home to be important, and assessed its possible impact on a child's socialisation and academic progress to be positive. Teachers' and parents' understandings of the priority objectives of school-home communication differed at times, but the parties were on consensus that the overlapping interests

and spheres of influence of school and home (Epstein 2011) are necessary for the development and teaching of a child.

Teachers attempt to cooperate with parents, believing that this would enhance parental support for the child's studies and socialisation. At the same time, teachers need to make an effort to analyse the frequency and type of information. Davern (2004) notes that to maximise the effectiveness of communication, the important must be distinguished from the unimportant and optimum communication frequency, sufficient to involve the parent and monitor the child's progress, has to be found. The type of school-home communication also depends on the parent (how they receive information and how cooperative they are) and the child (how much their socialisation and studies need to be supported).

The analysis of communication channel preferences revealed that teachers and parents of different types of school had somewhat different channel preferences. Furthermore, discrepancies between preferences of teachers and parents of the same school existed. Most expressively, the traditional diary firmly belonged to most teachers' channel preferences, while missing completely from the list of preferences of parent focus groups. The opinion expressed by parents that information written in the diary is not important and does not require feedback has parallels with the statement of Hagel and Brown (2005) that schools sometimes send parents information without being sure whether the parent uses and appreciates the communication channel selected by the school. Practical recommendations arising from these findings refer to the need to notice and consciously discard any prejudices about the communication partner's channel preferences (e.g. teachers' judgement of parents as the 'diary generation'), and thereupon explicitly agree on communication conventions. According to Lunts (2003), mutually agreed communication channels provide the teacher, parent and community with a more solid opportunity to support the child. Epstein (2011) also claims that communication would be more efficient when communication channel preferences coincided, which would also create better prerequisites for the creation of overlapping spheres of influence.

Regardless of partially conflicting attitudinal preferences, the channel selection in real communication situations mostly appears to be flexible and pragmatic, suggesting that teachers and parents pursue, more or less intuitively, functional and symmetrical interaction in interpersonal communication (Watzlawick, Beavin & Jackson 1967). Several teachers explained that they actually used the channel the parent had picked on the reasons of safety, comfort or promptness, as their goal was to interact with the parent by any means. Discussions of parents, in turn, revealed that they agreed to use the communication channel selected by the teachers. These results generally match the opinions of Olmstead (2013) and Zlotnikova & van der Weide (2015), pursuant to which developing home-school partnership benefits from the selection of (digital) communication channels, which takes partners' preferences into account and enables fast and efficient communication.

Digital technology has provided the opportunity to have dialogic communication without meeting in person. According to Olmstead (2013), parents and teachers appreciate the opportunity of interaction, which does not require the parent's physical presence at school. Our focus group discussions, however, revealed that many parents preferred to meet with teachers face-to-face to solve problematic issues quickly without mediated communication.

Many teachers and parents in our study mentioned the mobile phone as one communication channel preference. In primary school, telephone communication may, indeed, be necessary from time to time. Ramirez (2002) remarks that short phone calls can prepare a beneficial situation for later cooperation by creating for parents a positive experience of interacting with the teacher. According to some parents in our study, telephone communication is sometimes necessary because they feel uncomfortable with written digital communication, due to previous bad experience or insufficient skills. In line with this, Williams and Cartledge (1997) have emphasised that audio communication should be preferred to communicate with parents with lower writing skills.

All teachers in our study use written digital communication (e-school and e-mail) to a varied degree, finding these tools to be effective and fast, but very time-consuming. Teachers' attitudes to written digital communication are influenced by fear of digital footprint, forcing them to spend time to word precise and objective (not too personal) descriptions about the child's academic progress or behaviour. In addition, several teachers emphasised the need to choose their words carefully when writing to parents via e-school and e-mail, so that the text would be unambiguously understood.

Various researchers (Crozier & Davies 2007; Harris & Goodall 2008; Sacker, Schoon & Bartley 2002) believe that teachers, indeed, need to take into account the existence of different types of parents and the social factors behind this variety – the level of education, socio-cultural background or the living environment. Similarly to Flynn and Nolan (2008) we suggest that teachers should be supported by trainings in developing their social and communicative skills to cooperate effectively with all types of parents.

Our study revealed that parents are also insecure about written digital interaction with teachers, some of them reasoning this with earlier negative experience or insufficient skills. Thus, our practical recommendation is that parents, too, need support and training in (digital) communication, because lacking skills to interact with teachers effectively may become a problem for parents worried about the social adaptation or academic progress of their child. Hartman and Chesley (1998) find that schools, in particular, should provide instructions to support parents and obtain new communication skills to help them manage any issues concerning the child swiftly and constructively. The results of the survey EU Kids Online described above in the paper also indicate Estonian parents' wish to obtain more information and advice from school regarding online communication (about safer use of the Internet).

As a general conclusion we stress that despite the extensive opportunities and advantages of written digital communication, enthusiastically shared by many teachers and parents in our study, significant problems and communication barriers involved in using digital channels exist (see Nichols & Read 2002 for similar findings), some of which are related to uneven digital competence and some to prejudiced attitudes and fears. Therefore, it is paramount to provide both teachers and parents with evidence-based knowledge about strengths and weaknesses of all available communication channels, in particular, digital tools, to decrease fears of communication and increase mutual trust and development of shared communication conventions. Furthermore, practical trainings and workshops to enhance teachers' and parents' digital literacy skills would be needed to support the partners' efficient use of technological tools in fast and dialogic information exchange.

Limitations and suggestions for future research

A limitation of the study is the fact that the data (small-size focus groups, non-representative of teachers' and parents' age groups) do not allow comparing the participants by age. Future studies might focus on age differences in teacher-parent communication as age is one of the main factors of digital stratification in Estonia (Kalmus et al, 2013). Further research could also inspect more closely the hindrances and fears in teacher-parent communication. To spotlight the best practices and develop further training programmes, it would be useful to research how teachers with particularly good digital communication skills interact with parents.

ACKNOWLEDGEMENTS

The preparation of this paper was supported by the grants from the Estonian Research Council (ETF 8527) and the Estonian Ministry of Education and Research (IUT 20-38).

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