



## THE POTENTIAL OF DIGITAL TECHNOLOGIES TO BUILD EFFECTIVE PARTNERSHIPS BETWEEN TEACHERS AND PARENTS

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### ABSTRACT

**Aim:** To explore the potential of digital technologies in supporting effective, ethical, and sustainable partnerships between teachers and parents.

**Methodology.** The study employs a qualitative approach using reflexive thematic analysis within a social constructivist framework. The empirical basis includes data from 33 short-term qualification trainings conducted by the authors between January 2024 and June 2025, involving a total of 445 educational professionals across various regions and educational stages. Data were collected through observations, field notes, and professional discussions. The analysis reflects an interdisciplinary expert reflection, integrating perspectives from psychology and educational technologies.

**Results:** Persistent challenges were identified, including emotional strain, lack of coordinated approaches, formalization and limited time. Effective individual practices were highlighted, along with five key areas for the application of digital technologies: structured communication, visual engagement, feedback, home-based support, and event organization. Barriers related to digital insecurity and lack of institutional framework are also reported.

**Conclusions.** Digital technologies can significantly enhance teacher–parent interaction when they are pedagogically integrated, guided by ethical sensitivity, and implemented within a supportive environment. Structured training, shared models, and systemic support are essential for sustainable implementation.

**Key words:** communication, teacher-parent interaction, technology, qualitative research, reflective analysis

### INTRODUCTION

A sustainable partnership between educational institutions and families is widely recognized as a key factor in the holistic development of children—cognitive, emotional, and social—at both preschool and school age. Numerous studies and strategic documents, including the Strategic Framework for the Development of Education in the Republic of Bulgaria (2021-2030) (1) emphasize the importance of active family involvement for children's academic performance, personal well-being and inclusion in the educational environment (2, 3). In practice, however, building effective and collaborative relationships between teachers

and parents often proves challenging - particularly in contexts of increasing workload, cultural and linguistic diversity, digital inequality, and limited opportunities for direct contact (4).

In such contexts, digital technologies offer new opportunities to overcome the barriers to traditional communication. Research shows that active and timely communication between teachers and parents is associated with higher academic achievement, greater student motivation and a positive school climate (5, 6). However, conventional forms of contact—such as parent–teacher meetings, phone calls, and email correspondence—are often insufficient due to organizational, time-related, or cultural constraints.

Digital tools - such as educational platforms, mobile applications, videoconferencing, and artificial intelligence (AI)-based technologies—

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are expanding the range of options for more accessible, structured, and personalized communication (7). These tools can enhance communication clarity through the use of templates, visual materials, and digital diaries, while also enabling more flexible feedback collection via online surveys and forms. In this way, communication is no longer a one-way transmission of information, but involves active participation—families not only receive messages but can also respond with opinions or questions, thus reinforcing the interaction (7). The same technologies are particularly valuable for parents who, due to geographical distance, work-related commitments, or language barriers, have limited access to the school environment (7).

Particular potential lies in the integration of artificial intelligence (AI) tools that support message translation, content adaptation, visual resource generation, and automated communication through chatbots or notifications (8). These tools can help overcome language and communication barriers, which has an empowering effect and facilitates access to educational information. Moreover, automation reduces teachers' administrative workload and saves time on routine tasks such as manual translation or repeatedly sending the same information to multiple recipients (8). As a result, important messages reach families in a timely and comprehensible manner, making information more accessible.

Despite the evident benefits, the use of digital technologies in education requires critical and ethical reflection—particularly concerning personal data protection and information security (7), as well as the prevention of digital fatigue and the accumulation of technological stress among teaching staff (9). An additional challenge lies in the risk of technological fragmentation, which can emerge when multiple heterogeneous platforms are used without clear coordination. This may result in fragmented communication, duplicated efforts, and information overload for both teachers and parents. Therefore, when introducing new digital solutions, it is essential to adopt a balanced approach: to harness the advantages of technology for more effective and personalized communication, while simultaneously ensuring data security, avoiding tool overload, and fostering an inclusive, sustainable, and well-

coordinated environment for all participants in the educational process.

The present study aligns with this analytical perspective, focusing on the real challenges and opportunities encountered in the work of pedagogical specialists. The paper seeks to address the question: How can digital technologies support a sustainable, ethical, and meaningful partnership between teachers and parents in contemporary educational contexts?

## **MATERIALS AND METHODS**

### **Aim of the study**

The aim of this study is to analyze common challenges, effective practices, and opportunities for using digital technologies to build sustainable and meaningful partnerships between teachers and parents. It seeks to interpret the professional experiences, resources, and needs shared by teachers in real-world contexts and, based on this understanding, to propose practical, technology-supported solutions for improving interaction with families.

### **Methodological design**

This study employed a qualitative research design grounded in the reflexive thematic analysis framework proposed by Braun and Clarke (10), situated within a social constructionist paradigm. Knowledge is conceptualized as emerging from the interplay between lived experience, observation, and interpretive engagement. Thematic categories were not predetermined but developed inductively through interdisciplinary expert collaboration and ongoing professional dialogue.

### **Context and reflexive stance**

The research is situated within the activities of the Department for Information and In-Service Teachers Training at Trakia University – Stara Zagora. The two authors are faculty members with extensive practical experience in the fields of educational psychology and educational technology, respectively. This combination enables a synthesis of empathetic sensitivity to teachers' perspectives with a critical evaluation of the applicability of digital tools. The topic of teacher–parent interaction emerged as a recurring theme in the team's regular supervision meetings, prompting a need to systematically reflect on observed practices and

identify meaningful patterns across professional contexts.

### **Data sources and analytical process**

Due to the nature of the study, defining a strictly limited sample is not applicable. For the sake of transparency, however, it should be noted that only within the period January 2024 - June 2025 the authors implemented 33 short-term qualification courses with a total of 445 pedagogical specialists, including principals, preschool, primary, junior secondary and high school teachers, as well as resource teachers and psychologists. The trainings were conducted in face-to-face and online formats, including focused discussions, individual assignments and supervision case studies.

The following data sources were used:

- field notes recorded immediately after training modules;
- syntheses of discussions capturing recurring themes, reactions, and attitudes;
- observations and notes from internal supervision meetings;
- collectively formulated summaries from team interpretation sessions

The analytic process follows the six phases of reflexive thematic analysis described by Braun & Clarke (10):

- 1) Familiarisation with the data – reviewing and making sense of notes, syntheses and discussion fragments;
- 2) Generating initial codes – identifying recurring patterns, attitudes and professional tensions;
- 3) Constructing themes – analytically grouping codes through collaborative dialogue between researchers;
- 4) Reviewing themes – examining coherence, internal logic and analytic relevance;
- 5) Defining and naming themes – clarifying the central meaning of each theme;
- 6) Producing the report – structured and interpretative presentation of the results.

In line with the inductive and reflexive approach, the research team formulated the following guiding questions, aimed at key aspects of teacher–parent interaction:

- What emotions and challenges most often accompany this interaction?
- What attitudes and internal tensions emerge among teachers?
- Which practices are perceived as effective and where are they most commonly applied?

- What digital platforms are used, and what possibilities do they offer?
- What limitations and barriers are encountered in the use of technology?
- What new approaches or models could be developed in response to the identified difficulties?

The questions play a guiding role in the analysis without predetermining the structure of the data. As a result of the coding and interpretation, ten thematic clusters emerged, reflecting common attitudes, challenges and opportunities in pedagogical practice.

For the sake of analytical clarity, the themes are summarised into three main areas:

- 1) Interaction challenges and tensions;
- 2) Good practices and limitations in pedagogical practice;
- 3) Technological support opportunities.

This thematic grouping facilitates comparison between challenges, effective strategies, and potential solutions supported by digital tools.

### **Trustworthiness and Ethics**

This study does not aim for statistical representativeness but offers qualitative insights into enduring patterns of professional interaction. Credibility is supported by repeated observations across diverse training contexts, interdisciplinary interpretation, and collaborative analysis by a team with complementary expertise. The data derive from authentic, professionally reflective situations without the collection of sensitive personal information, and with due respect for the professional identities of all participants.

## **RESULTS**

### **Reflexive thematic structure**

In accordance with the inductive and interpretive framework of reflexive thematic analysis (10), three overarching interpretive strands were identified, each encompassing several interrelated thematic cores. The themes were not predefined, but emerged through in-depth engagement with the data—observations, notes, and professional reflections—collected during short-term training sessions with educational professionals between January 2024 and June 2025. Each strand represents a specific aspect of teacher–parent interaction, highlighting recurring attitudes, professional experiences, and opportunities for

development. The following presentation is structured according to this analytical framework, with themes discussed within the scope of each strand.

### **I. Interaction challenges and tensions;**

#### **1) Emotional stress and frustration:**

Teachers often describe communication with parents as emotionally exhausting. In situations of conflict or lack of cooperation, such interactions are experienced as an extraordinary effort that exceeds the boundaries of their daily pedagogical routines. Feelings of guilt, professional helplessness, and pressure are frequently shared, especially when institutional support is poorly defined or absent. These experiences appear consistently in participants' accounts, pointing to systemic vulnerabilities that call for targeted organizational support.

#### **2) Conflicting attitudes and lack of a shared team approach**

The analysis reveals internal heterogeneity in teachers' attitudes toward partnership with parents. While some educators demonstrate active support, others express hesitation, vague expectations, or even covert resistance. This divergence results in fragmented messaging and the absence of a coherent team strategy, which hinders the development of consistent and trust-based relationships with families.

#### **3) Formalization and lack of sustainable models**

Many forms of teacher-parent interaction appear to be reactive and episodic—triggered by specific problems, conflict situations, or administrative requirements that need to be fulfilled. This tendency is particularly evident in high school, where the role of the family is often reduced to a formal presence, and communication focuses primarily on grades, absences, or disciplinary concerns. In the absence of a clear and sustainable model of partnership, interaction tends to be reduced to one-way “informing,” often via digital platforms or brief notifications. Such communication does not foster dialogue, fails to build trust, and does not promote a shared sense of responsibility for the student's development.

#### **4) Time as a critical resource**

Lack of time emerges as a systemic constraint that significantly limits the potential for meaningful communication. Teachers report that interactions with parents often occur

outside working hours, under heightened pressure, and without the necessary conditions for effective exchange. Administrative workload tends to push communication tasks into the background, while digital tools—when lacking clear structure and institutional support—sometimes create a sense of additional strain rather than easing the process.

### **II. Good practices and limitations in pedagogical practice**

5) Personal initiatives with a positive effect  
Examples shared by teachers reveal the presence of effective individual strategies for building trust and closeness with parents – not only through face-to-face interactions such as workshops and events, but also through visual diaries, encouraging notes, open-ended questionnaires, and sharing photos of activities. Although these approaches often fall outside the scope of official policy, they demonstrate a high sensitivity to families' needs and a commitment to clear, warm, and engaging communication. The analysis highlights that personal motivation and pedagogical empathy are key drivers of sustained good practices.

6) Isolation and lack of sustainable sharing  
Although valuable individual initiatives are being carried out, the sharing of good practices among teaching staff remains limited. Teachers seldom have the opportunity to exchange experiences or engage in joint reflection, which makes such efforts more fragile and reliant on individual motivation. The absence of structured opportunities for collaboration hinders the development of a shared culture of partnership with families.

#### **7) Potential to institutionalize successful practices**

The analysis reveals a clear need for good practices to be not only acknowledged, but also sustainably supported through internal institutional mechanisms. Teachers express a desire for an environment in which successful models of communication with parents can be developed, shared, and adapted within a team-based framework. Such support would contribute to a more consistent, inclusive, and equitable dialogue with families.

### **III. Technological support opportunities**

#### **8) The potential of digital tools in the school context**

Based on professional reflection and insights from the trainings, a repertoire of digital tools emerged that are already being used in preschool and school practice, or have the potential for easy integration into parent communication. These technologies can be broadly grouped into three main categories:

- **Platforms and interaction channels** - Google Classroom, ClassDojo, Microsoft Teams, Seesaw, school websites and administrative systems such as Shkolo and NEISPUO;
- **Content creation tools** - Canva, Google Forms, Wave.video, etc.;
- **Artificial Intelligence (AI)** - language models and applications such as ChatGPT, Gemini, Leonardo.ai, Renderforest.com, Runway, Suno, MagicSchool, Dream AI.

Regardless of the specific frequency of use, all of these tools have characteristics that make them particularly suitable for pedagogical contexts: accessibility, visibility, customizability and adaptability to different communication styles.

#### 9) Application areas for using technology in partnership with parents

During the analysis, five key application areas were identified in which digital technologies can purposefully and effectively support interactions with parents. These areas reflect both existing practices and opportunities for broader integration into everyday pedagogical communication:

1. Structured and timely communication - the use of templates, categorised messaging and digital platforms supports consistency, traceability and a clear tone in communications with parents;
2. Visual engagement - posters, flyers, videos and infographics make information more accessible and memorable, especially in contexts with limited reading time or language barriers;
3. Feedback and dialogue - surveys, forms and interactive tools create a space for parent voice, sharing and co-defining needs;
4. Home-based family support - by sharing guidance materials (videos, infographics, practical tips) teachers can facilitate parental involvement in children's learning and daily routines;
5. Event and meeting organisation - online calendars, participation confirmations and

reminders improve coordination allow broader participation with minimal logistical effort.

#### 10) Constraints and barriers to the use of technology

Alongside the clear potential of digital technologies, the analysis also identifies significant barriers that hinder their systematic and confident application in communication with parents. Among the most frequently mentioned challenges are:

- the lack of targeted training and practical guidance on the effective and ethical use of digital tools;
- uneven digital competence among both teachers and parents, which complicates the creation of sustainable communication channels;
- uncertainty regarding the legal and ethical dimensions of digital communication, including data protection, publishing permissions, and online etiquette.

These barriers often result in reluctance to innovate, superficial or sporadic use of technological resources, and uncertainty in selecting appropriate approaches. Despite this, a positive trend is emerging: many teachers are demonstrating initiative and openness, actively seeking digital solutions that not only facilitate information exchange, but make it more accessible, personalised, and sustainable.

## DISCUSSION

The results of the reflective thematic analysis highlight common challenges, emotional tensions, and inconsistencies in communication practices between teachers and parents. Despite a high level of awareness regarding the importance of family partnership, interactions often remain fragmented, reactive, and dependent on individual teacher initiative. This aligns with international research emphasizing that effective parental involvement requires institutional support, cultural sensitivity, and a clear communication framework (2, 11).

Teachers' shared experiences show that even when motivation is present, actual communication often proves challenging due to a range of barriers – limited time, workload, complexity of cases, emotional stress, and often mismatched expectations. The absence of a structured framework leads to sporadic contact,

usually triggered by a problem, which distances parents from their role as active partners (12).

The issue of emotional tension is particularly prominent – some teachers perceive communication with parents not as a resource, but as a source of stress, misunderstanding, or even threat. This aligns with the observations of Harris & Goodall (13), who note that when partnership is experienced as a one-sided effort, it easily deteriorates into a formal or defensive stance. Additionally, divergent attitudes within the teaching staff – ranging from openness to skepticism – result in uncoordinated messaging and hinder the development of trust (14).

In light of the contemporary technological environment, new opportunities are emerging for educational communities to build sustainable, accessible, and context-sensitive communication between teachers and parents—communication that builds on existing practices and fosters mutual understanding. Against this backdrop, digital technologies appear as a potential mediator capable of facilitating communication processes and structuring interactions. However, their potential remains only partially realized—due to lack of training, uncertainty about content, and ethical concerns (15). As the results indicate, effective use of technology requires not merely access to tools, but also the development of pedagogical literacy for their application in sensitive contexts.

In this sense, the difficulties should not be viewed as individual shortcomings, but as a systemic need for targeted support, professional sharing, and an institutional framework that acknowledges teachers' efforts and assists them in building partnerships with families. The goal is not a universal model, but rather adaptive solutions tailored to the specific context of each school.

### Recommendations for practice

Based on the analysis, the following guidelines can be formulated:

- **Establish a clear institutional framework for communication**, including a contact protocol, message templates, and a plan for providing positive feedback to parents;
- **Support for professional capacity building through practical training** with multidisciplinary teams, based on real case

studies and dialogue between teachers and parents;

- **Use of visual and interactive formats** to enhance families' understanding of information and facilitate their accessible involvement;
- **Combine digital communication with face-to-face contact**, by offering flexible meeting formats that accommodate all parties;
- **Collect regular and purposeful feedback** from parents through short, specific, and easy-to-complete surveys, used to meaningfully improve interaction.

### Limitations of the study

As a qualitative study, the present analysis does not allow for generalizing conclusions. It is based on professional experience and expert reflection, which entails a degree of subjectivity, yet brings to light patterns of practical relevance. The lack of parental perspective and of external verification through objective records point to opportunities for further development. Future research could include mixed methods, a clearly articulated methodology, and an ethical protocol encompassing diverse perspectives.

### CONCLUSION

The interaction between teachers and parents is not merely a tool for managing the educational process, but a cultural and ethical act of creating a community in which the child develops. Family and preschool education should be aligned with the same goal – the child's healthy psychosocial and emotional development (16). This study demonstrates that effective communication requires more than technical solutions—it calls for an awareness of the relational nature of education, supported by contextual sensitivity, an institutional framework, and a willingness to learn from one another.

When viewed through this lens, the potential of digital technologies is not just a matter of innovation, but of transformation—in how educational communities understand participation, trust, and shared responsibility. What is needed is a cultural shift, professional support, and a systemic vision that places family partnership not as an optional add-on, but at the heart of contemporary education.

In this context, technology can become not only a tool for information exchange, but a platform for building trust, mutuality, and a sense of belonging. In doing so, digital communication evolves into digital partnership—sustainable, respectful, and centered on the well-being of every child.

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