# THE APPLICATION OF CLOUD TECHNOLOGIES IN PARENT-TEACHER COMMUNICATION

## Vera Shopova, Ivan Dimitrov, Gencho Stoitsov

**Abstract.** The article presents the importance of communication and cooperation between teachers and parents in achieving effective learning. In terms of sharing good practices, the application of cloud technologies (Google Sites, Classroom, Forms, Meet, Calendar) was implemented as a tool for the establishment of a successful teacher-parent partnership.

Key Words: parent, teacher, communication, partnership, classroom

#### Introduction

Pedagogical researches concerning the establishment of a successful cooperation between parents and teachers are mainly focused on the factors determining the effectiveness of parent-teacher communication. In this context, a special attention has to be paid on the limitations for building effective relations with parents. The modern researches already started to put a stress on various school strategies needed for attracting parents as partners. The aim of these strategies is to make schools be more active in finding effective cooperation with parents in such a way that parents can contribute to the overall process of education. The article focuses on the possibility for realization of successful partnership between parent and teacher by the application of cloud technologies.

## **Teacher-parent partnership**

A successful teacher-parent partnership is guaranteed only if teachers and parents assist each other's work. If teachers are experts in the field of education, parents are experts when it comes to their children. While teachers are competent enough to create a suitable learning environment, parents know best when it comes to the social emotional development of their children. The reason for that is the possibility for parents to see the behavior of their children in different kind of situations out of school compared to teachers.

In this context, the information that parents give about their children could be very useful for teachers. A teacher-parent partnership is built on the base of mutual trust, which requires from teacher to acknowledge parent's parenting and relationship with his kid.

There is no doubt that teacher-parent partnership model leads to the highest degree of effectiveness in students' personal development and achievement of school education goals. This model requires regular communication and mutual respect between teachers and parents in order to be effectively applied in practice. Teacher-parent partnership needs to be constantly supported by appropriate communication tools. The choice for the used form of communication should be made after consultation with parents. Gradually, new communication tools can be introduced like electronic diary, class website, virtual classroom, chat groups and etc.

Attracting parents to assist education process could be possible if there is active teamwork between teacher and parent. For this reason, Velcheva and Garov support the implementation of cloud technologies in education because it develops communication and cooperation skills [5].

## Cloud technologies in parent-teacher communication

Online education during pandemic is a real challenge for teachers, students and parents. Hristov and Chochev [2] comment the difference between formal and informal distance learning (also called conference online learning by the authors). According to the source, conference online learning has a place in the educational system as a learning approach, method or means depending on the context and the conditions of its application. Conference online learning is presented as a combination of verbal synchronous correspondence and writing asynchronous communication between participants in education, who benefit from conference platforms, specialized web sources, digital cloud services and another electronic resources.

Cloud computing also finds its application in the educational system [1]. Teachers use a wide variety of software applications from the type SaaS (Software as a Service) for conducting the teaching process.

The next challenge for teachers is finding new ways and suitable tools for successful communication with parents.

The article presents the application of Google Apps (Sites, Classroom, Meet, Forms, Calendar) which leaded to a successful partnership with parents. Mollov and Stoitsov also support the implementation of cloud technologies for supporting teacher-parent partnership [3].

According to Shopova, the Google Educator Level 2 certification and the following qualifications gave her the necessary skills and competencies for working with the applications Sites, Classroom, Meet, Forms, Calendar. In the role of class teacher and teacher of Information technologies and Natural Sciences in middle school, the author was using cloud technologies as a tool for communication with parents.

Classroom for parents has the following features:

- Communication with parents everywhere and at any time;
- Sharing of information as video, text, brochure and etc.;
- Sending of individual or group messages simultaneously;
- Requires only a Google account;
- Easy and comfortable application for use;
- Accessible by any device.

The experience from the application of Classroom and Google sites leads to the following conclusions:

- A successful communication with parents could be supported (Figure 1) while it saves a lot of time and finances (Figure 3);
- The easy use of the application makes it accessible and recommended (Figure 2).

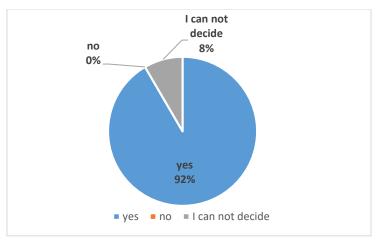


Figure 1. Do you approve the use of Google Classroom and Meet as technological tools for information and communication with you in conditions of limited social contacts?

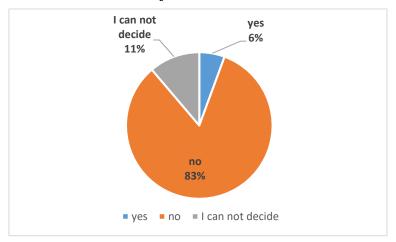


Figure 2. Do you find any difficulties when you use Google Classroom and Meet for communicating with the teacher and receiving feedback from him?

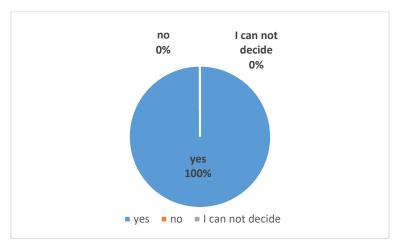


Figure 3. Do you think electronic communication with the teacher and school management saves time and finances?

Additionally, created and used websites for 5<sup>th</sup> and 6<sup>th</sup> grade by Google sites are also suitable tool for a teacher-parent partnership. The goal of the created website is the inclusion of parents in charity campaigns, club activities and meetings with psychologist for receiving parenting advices. The website is recommended for parents and students and it includes the webpages" School for parents", "Green alternatives" and "Charity campaigns".

Information is published about the held campaigns for the role of school education at webpage "School for parents". The topics of the campaigns are:

- School space for all ages information campaign for school initiatives, focused on the role of education and support of parents during the education of their children.
- Education travelling for the hard transition during 5<sup>th</sup> grade and how this can be handled successfully. Indicators for education problems.
- School in the eyes of students why are interests and strong sides of students important? Career development.
- Invisible scars how to distinguish between the different forms of violence and discrimination?

Each club activity is presented at webpage "Green alternatives". Together with parents, the teacher organizes club initiatives. During 2020/2021, a project associated with the planting of the school yard, was realized. In the same year, information campaigns, contests and competitions on topics about protecting the environment were published.

At webpage "Charity campaigns", information can be found about the held Christmas charity bazaar (study year 2019/2020) and the charity for the buying of the book, marking the 50<sup>th</sup> anniversary of school.

The good practice shared by using the aforementioned website (Figure 4) is the reason for the creation of websites for another classes or clubs in the school.

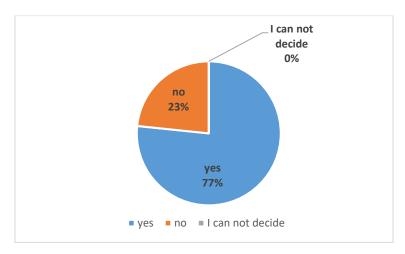


Figure 4. Does the information about charities and initiatives, uploaded on the website of the class, reach you?

The fast information upload, the sharing of good practice, the easy use are just some of the advantages, which make the Google Sites application recommended for online learning.

Google Forms is an effective tool for communication between teacher and parent due to the features like quick and easy creation of inquiry, researches, registration forms and etc. The information is obtained and presented as tables and graphics.

Forms are accessible and suitable tool for reaching parents and suggesting them a partnership (Figure 5).

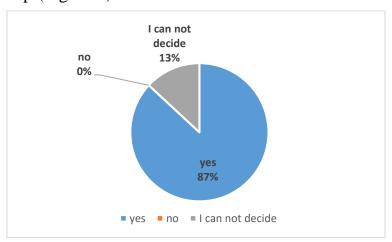


Figure 5. Do you think the electronic forms, created by the teacher for you, are suitable tool for asking the parents and suggesting a partnership?

Google meet is a powerful tool used for holding classes, parent-teacher conference, individual pedagogical consultation, career development, parties, competitions and etc. The conclusions about it are:

- Video conference with high number of users is possible;
- Easy link sharing for video conference;

• The information is accessible at any computer, tablet or smartphone by using personal online account [4].

In the last two years, Google Meet was used as a means for teacher-parent partnerships and holding online parent-teacher conferences, parties, competitions and contests due to the pandemic limitations.

Google Calendar provides the possibility for planning events, synchronization and cooperation.

The application allows sharing and supporting several calendars simultaneously on different user devices, which is an excellent way for scheduling, planning of parent-teacher conferences, competitions and etc. Finally, the application allows quick addition to Hangouts meet and video conferences, which favors users.

To confirm the aforementioned conclusions, a poll with the parents of students from different classes ( $5^{th}$  and  $6^{th}$  grade) is conducted during study years 2019/2020 and 2020/2021. Part of the results are presented on the following figures.

### Conclusion

A successful teacher-parent partnership is the key to achieve effective education process. It can be realized in the conditions of pandemic if the parents know how to use correctly the Google cloud applications.

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