

The Contribution of eTwinning Projects to the Development of Students' Linguistic, Communicative, and Collaborative Skills in Primary Education: Teachers' Perspectives

Chrysanthi Stergaki , Marina Kougiourouki *, and Evmorfia Passa 

ABSTRACT

eTwinning is one of the most valuable digital platforms for the educational community of the 21st century, due to its innovative learning approach and its ability to enhance students' skills. The purpose of this study is to investigate the development of students' linguistic, communicative, and collaborative skills through the implementation of eTwinning projects. Using semi-structured interviews as a methodological tool, this qualitative research aims to highlight the perspectives of primary education teachers regarding the benefits derived from the implementation of eTwinning projects, the ways in which linguistic, communicative, and collaborative skills are cultivated during student participation in these projects, and the factors contributing to the enhancement of these skills. The findings indicate that teachers believe participation in eTwinning projects helps students learn to accept and respect diversity, fosters an alternative way of thinking, and enhances their digital, linguistic, communicative, and collaborative skills. Additionally, the study reveals the teachers' willingness to adopt diverse approaches to developing students' language, communication, and collaboration skills. Some of these methods include continuous interaction and communication among students during individual and group tasks, enriching eTwinning project instruction with audio materials, adapting activities to the learning level of the class, relating the content of eTwinning projects to students' everyday life and interests, engaging in collaborative writing, encouraging individual expression, and more.

Keywords: Collaborative skills, communicative skills, eTwinning, linguistic skills.

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Department of Primary Education, Democritus University of Thrace, Greece.

* Corresponding Author:
e-mail: mkougiou@eled.duth.gr

1. INTRODUCTION

eTwinning is one of the most significant and innovative digital platforms for the educational community. Initially, its primary goal was the interaction among schools in Europe, which gradually evolved into the exchange of information on cultural and social issues, the improvement of participants' vocabulary, and more (Camilleri, 2016). Since its inception, eTwinning has undergone substantial development in terms of the operation and use of the digital services and tools provided within the virtual environment of TwinSpace (Leto, 2018). By ensuring reliability and transparency through regular evaluations conducted by members of the European Commission, the eTwinning

digital platform creates a secure environment for educators who use the platform (Crisan, 2013).

The uniqueness of this digital platform lies in the flexibility it offers in teaching and learning, as students acquire new knowledge and enhance various skills without being confined by "place" or "time" (Lin *et al.*, 2017). The utilization of tools and services from such digital educational environments contributes to a deeper understanding of the academic subjects taught in schools, as a "product" of digital learning (Zervou & Zampouli, 2017), and to the enhancement of students' collaboration, autonomy, and critical thinking skills (Sayaf *et al.*, 2022).

The benefits of creating educational eTwinning projects, as outlined by Akdemir (2017), include the improvement



of teaching and learning effectiveness, the exchange of information on cultural topics between partner schools, the enhancement of students' active engagement during project implementation, and the development of participants' linguistic, communicative, and collaborative skills. Specifically, with regard to improving students' language, communication, and collaboration skills, the activities that teachers design and implement during teaching should aim to enhance the quality of communication and collaboration among participants (Chalkiadaki, 2018).

The cultivation of linguistic skills is achieved, on the one hand, through the establishment of the communication language for the eTwinning project and, on the other hand, through the continuous interaction and communication among participants, either within the classroom or during exchanges with partner schools involved in the eTwinning project (Tosi Tosi & Baptista, 2023). During the implementation of eTwinning projects, both active linguistic skills—such as speaking and writing—and passive linguistic skills—such as listening and reading—are thoroughly improved (Akdemir, 2017). The development of passive linguistic skills is particularly evident in students' participation in activities involving the transmission of audiovisual messages in the communication language of the eTwinning project, which in most cases is English (Hwang et al., 2014).

Due to the nature of eTwinning projects, students also cultivate their communicative skills through their participation in this educational process, engaging in continuous interaction both with their peers in working groups within the classroom and with students from partner schools (Camilleri, 2016). Given that the design and implementation of eTwinning projects are based on project-based learning (PBL), students are provided with opportunities to take an active role, encouraged by the emphasis on ongoing communication (Jelihovschii & Jelihovschii, 2020). In this way, students' involvement in eTwinning activities thoroughly improves their oral and written expression, enhances their ability to solve everyday problems, and fosters their creative thinking (Brata & Mahatmaharti, 2020).

The implementation of eTwinning projects is grounded in “authentic learning”. In these learning environments, the collaborative “spirit,” argumentation, and critical thinking of learners are enhanced. Common goals are established, and, more broadly, a sense of “belonging” is cultivated (Dimitropoulos et al., 2013). Based on the above, the collaborative skills of students participating in eTwinning projects are also strengthened, a goal achieved through the integration of authentic learning into the educational process (Gajek, 2021).

2. METHOD

The purpose of this study is to explore the perspectives of primary education teachers regarding the development of linguistic, communicative, and collaborative skills among primary school students during their participation in educational eTwinning projects. Emphasis is placed on the contribution of the eTwinning digital platform to improving students' language, communication, and collaboration

skills, as well as on the factors considered by teachers in the design and implementation of eTwinning projects to enhance these skills.

This study employed a qualitative research approach, utilizing interviews as the primary research tool. Specifically, semi-structured interviews were chosen to allow for the establishment of key thematic “pillars”, based on which open-ended questions were designed. These questions were not necessarily identical for all participants in the sample (Isari & Pourkos, 2015). The open-ended nature of the questions provided flexibility in modifying the content of participants' responses. Data collection took place from May to June 2024.

The research material consists of ten transcribed interviews with primary education teachers. Convenience sampling was used to select the research sample, ensuring that participants met the study's objectives and were selected based on their availability and willingness to participate (Etikan et al., 2016).

The study involved ten primary education teachers, nine women and one man, with teaching experience ranging from 5 to 34 years. Six of the participants held at least one postgraduate degree. For six of the participants, their experience and engagement with the eTwinning digital platform were equal to or greater than seven years. Two of the participants had implemented up to 20 eTwinning projects by the current academic year, while the remaining eight had completed up to 10 projects.

Following the transcription of the semi-structured interviews, the research data were analyzed using the content analysis method. This approach enabled the categorization of data derived from participants' responses, aiming to highlight emerging relationships (Magos, 2005). Emphasis was placed on references with higher frequency in the interview texts.

Subsequently, the research material was organized into various categories, structured based on common elements in the participants' responses. The following section presents verbatim excerpts from the participants' interviews to provide a deeper understanding of their answers.

3. RESULTS

The analysis of the teachers' responses highlights the benefits of engaging with the eTwinning online platform for students. According to the teachers, these benefits are numerous and diverse. Through participation in an eTwinning project, students collaborate with peers from different countries and cultural backgrounds, acquiring a variety of skills, experiencing a sense of “belonging”, and understanding and appreciating others' perspectives. Teachers noted: *“eTwinning projects offer numerous advantages for the development of students' skills and competencies, especially when collaborating with other countries and diverse cultures”* (P8). Additionally, a significant benefit of eTwinning is that *“through the collaboration developed among students in eTwinning projects, acceptance and respect for diversity are also fostered”* (P1).

Teachers consider the primary benefits to be associated with the development of students' linguistic skills, collaboration and communication skills, digital competencies, and alternative thinking.

Regarding the development of students' linguistic skills, teachers highlight that engaging in eTwinning projects allows students to communicate and collaborate with peers from schools abroad. This interaction necessitates frequent use of the communication language, which in this case is English. They note, for instance, that *"an important benefit is the collaboration of students with peers from other countries, which consequently leads to the practice of the English language"* (P7). Similarly, another teacher emphasizes that *"one of the main benefits is the improvement of students' proficiency in the English language"* (P9).

Concerning the development of students' linguistic skills during the implementation of eTwinning projects, the participating teachers identify ways in which speaking, writing, listening, and reading skills are cultivated. Specifically, it is noted that *"students undoubtedly develop language skills in both Greek and a foreign language"* (P1). With regard to the development of students' speaking skills, it is emphasized that *"speaking skills are primarily developed in the language of communication"* (P6) and *"during group work in the classroom and videoconferences with partners"* (P9). Another approach to enhancing students' speaking skills is encouraging free expression on everyday topics. For instance, it is highlighted that *"to develop oral communication, students are invited during videoconferences to talk about their free time and family"* (P2), and *"in activities, children will speak and introduce themselves in Greek and English, which helps boost their confidence"* (P4).

Students' writing skills are developed both individually and collaboratively during the implementation of projects on the eTwinning digital platform. Specifically, it is noted that one method of fostering these skills involves *"collaborative activities where students use written language"* (P1). Another participant elaborates, explaining that *"some activities include writing a text on paper, a collaborative poem, a fairy tale, or an imaginative story (. . .) where one child starts, and another continues"* (P8). Another way to enhance students' writing skills is by aligning the themes of eTwinning projects with their interests, daily lives, and preferences. For instance, some teachers mentioned that *"in one project, students were required to send Christmas wishes in the languages of the participating countries"* (P6) and that *"students in these projects can write letters, send messages, or present something"* (P4).

During the implementation of eTwinning projects, students' listening skills are improved through various methods. Their development occurs *"during videoconferences, through communication with peers"* (P1). Specifically, it is emphasized that *"in videoconferences, students need to understand the questions posed by their peers from other schools in order to respond accordingly"* (P9). Another way to enhance students' listening skills is by enriching instruction with auditory material. It is noted that *"students need to work collaboratively and listen to a video, a piece of music, or an excerpt, and then discuss it"* (P1), as well as *"a narration or a song"* (P8), and *"with the help of videos"* (P9). An engaging method for strengthening students' listening

skills is the creation of interview questions. A teacher explained that *"students can formulate questions and conduct interviews with their peers, students from another class, the school principal, or community representatives"* (P1).

The development of reading skills during the implementation of eTwinning projects is achieved through approaches such as *"students isolating a piece of information from a text, from a newspaper"* (P1). Other teachers note that *"we usually found information from websites related to the topic we were working on"* (P2) and *"many times we engaged in reading a literary text or a poem"* (P8).

The factors considered by teachers in the design and implementation of eTwinning projects to enhance students' language skills focus on the student, the syllabus, and the teaching methods.

Specifically, teachers report that when designing an eTwinning project and throughout its implementation, their thoughts and actions are guided by the students' age and learning level. In this way, they believe that students' participation in the project will seamlessly promote their language skills. They emphasize that *"the project must address the students' age group"* (P1) and that *"for the development of language skills"*, they take into account *"the students' learning level"* (P10).

Another factor teachers consider when designing an eTwinning project is the syllabus. They note that they ensure the content of the project aligns with the national curricula. In this way, students are more actively engaged, exchanging information with other collaborating team members, which in turn facilitates the practice of their language skills. Specifically, they state: *"I tried to align the content of the eTwinning project with the History curriculum so that the students would have the knowledge and feel comfortable contributing to the discussion"* (P3).

Finally, another parameter teachers take into account when designing an eTwinning project, to ensure its implementation promotes students' language skills, is the application of collaborative teaching methods. Active student participation in working groups and the assignment of roles and responsibilities strengthen dialogue among students, as well as the exchange of information, ideas, and opinions. Teachers note that *"students should be divided into groups so that they speak and participate actively"* (P7) and that *"every child has their role in group activities, allowing even those with low self-esteem and confidence to take on a role and become part of the same puzzle"* (P6).

In addition to the development of students' language skills, teachers report that collaboration and communication skills are equally enhanced. They emphasize that *"an important benefit is students' communication with peers who speak different languages"* (P3), and *"students develop their collaboration skills with peers from other cultures and often collaborate with students of different ages"* (P9). Regarding the development of students' collaboration skills, they note that *"there are smaller-scale benefits, such as students feeling useful in the eTwinning project and developing other skills related to the implementation and dissemination of the eTwinning project"* (P5).

Regarding the development of students' communication skills, the methods of cultivation focus on improving

their non-verbal, verbal, oral, and written communication during their participation in eTwinning projects. For the development of non-verbal communication skills, it is noted that “students communicate with their bodies, hands, and gestures” (P3), and “they may need to demonstrate something, as there is not always time to speak. Students can showcase their work during a teleconference without speaking, using their expressions” (P8). According to the participants' responses in the study, non-verbal communication skills are thoroughly enhanced during students' involvement in collaborative activities. Specifically, it is mentioned that “one method is collaborative drawing” (P3) and “working in groups, as it creates a social contract” (P1).

A method of enhancing students' verbal communication during the implementation of eTwinning projects is through oral presentations of information related to everyday life. Specifically, it is mentioned that “verbal communication takes place when one school presents its region” (P2) and when “we gather to sing songs, ask questions to one another's school, and students express their feelings” (P4). Both verbal and oral communication are extensively strengthened through students' participation in collaborative activities conducted within the digital space of TwinSpace. More specifically, it is highlighted that “there are chat rooms used by students, where they can communicate, as well as during the Online Meetings that are held” (P2).

According to the participants' responses in the study, written communication skills are enhanced through activities such as the “collaborative fairy tale, where one class begins the story, and another class from a different school continues it” (P8). Another method for improving these skills is the collaborative writing of various texts or stories, where “one school starts them, another continues them, and then they are sent back to the first school” (P4).

Students' participation in collaborative activities is a key factor in enhancing their communication skills. For this reason, teachers report that they take this factor seriously into account when designing and implementing eTwinning projects. Additionally, two other factors mentioned as being considered to further strengthen students' communication skills are the alignment of the learning content with students' interests, preferences, and daily lives, as well as the creation of a familiar and friendly classroom environment.

In relation to student engagement in collaborative activities, teachers believe that such methods create a framework for cooperation and communication, thereby enhancing student interaction. More specifically, two teachers noted: “I encourage my students to communicate through collaboration” (P4) and “I aim to foster student communication through joint efforts in the classroom” (P8). Furthermore, one educator highlighted the importance of coordination among schools, stating that “there must be an understanding between schools to create activities that enhance communication... it is a necessary prerequisite” (P8).

Another factor that teachers consider when designing and implementing eTwinning projects to promote students' communication skills is the connection between the learning subject and students' interests, preferences, and everyday lives. One teacher emphasized that “a primary

concern is for eTwinning projects to align with students' interests and have a direct relevance to their daily lives” (P2), while another noted: “I might observe that in one group there are students who are ‘painters’... and in another group students who might be better at writing a short text... So, I will ask them what they would prefer to work on, and the allocation of activities will be based on that” (P4). Teachers thus state that “working groups are formed based on students' interests and aptitudes, so that students are placed in groups that captivate their interest” (P10), thereby encouraging active participation and fostering the development of their communication skills.

Finally, another significant factor that teachers consider enhancing students' communication skills in eTwinning projects is the creation of a familiar and friendly atmosphere in the classroom. More specifically, one teacher noted: “I wanted my students to be placed in groups that would captivate their interest, cultivate their critical thinking, and foster a friendly environment” (P10). The teacher justified this position by stating that “it is important for the student to feel comfortable... because only then can they give 100% of their potential” (P10).

Regarding the development of students' collaboration skills during their participation in eTwinning projects, the formation of transnational teams can effectively enhance their critical thinking, initiative-taking, and autonomy. It is noted that “in transnational teams, the child collaborates beyond the level of the classroom with the partner school implementing the project, so we are now talking about collaboration at the international level” (P1). Additionally, another method for fostering students' collaborative skills is their interaction with classmates, as the continuous communication among team members significantly determines the effectiveness of the eTwinning project. Specifically, teachers report that “collaboration skills were also strengthened among students within the classroom” (P3) and that “since the projects are collaborative, and everything we do in the classroom is part of a larger collaborative product, it is very important to develop good collaborative relationships among ourselves” (P5).

Insights from the teachers' responses in the study reveal that an effective way to improve students' collaborative skills during the implementation of eTwinning projects is through collaboration with students of different age groups. It is highlighted that “students achieve a different kind of collaboration” (P1) during their interaction with the partners of each project, as students from each age group contribute their own “touch” to the creation of a collaborative project, always in accordance with their capabilities.

The primary factor that teachers consider when designing and implementing eTwinning projects, as they believe it is closely related to the development of collaboration skills, is the students themselves. Aspects such as their practice in collaborative projects, the assumption of roles, and encouragement for autonomy are regarded by teachers as crucial for fostering collaboration skills.

The method of group work required for the implementation of an eTwinning project is unique and demanding, often differing significantly from the everyday activities in which students participate within the teaching framework.

Therefore, it is essential for the teacher to prepare students in advance for this mode of working by organizing small-scale group activities. One teacher emphasized that it is preferable for students to collaborate in groups even before the commencement of the eTwinning project, noting that *"to achieve the best results, students must have prior experience working at the group level... so that everyone understands how they need to work"* (P5).

In the context of these groups during the implementation of the eTwinning project, each student assumes a role to which they are expected to contribute. Teachers emphasize that this parameter is considered significant for the development of students' collaboration skills. More specifically, it is highlighted that *"each student has their role within the group (...) someone might draw, someone else might write something... and the roles are rotated when the student is ready to take on a different responsibility within the group"* (P9).

Students must take initiative, propose ideas, and accept solutions to effectively fulfill the various roles assigned to them. Achieving this requires encouraging students to demonstrate initiative and engage in communication during their participation in the working groups. This factor is regarded as significant by the participants in our study, who stated: *"To achieve collaboration... we had to create a familiar and comfortable environment. My colleagues and I tried to offer advice without raising our voices or making criticisms. In other words, the students did not want to perceive us as an authority figure, issuing commands that they had to follow... When my students encounter difficulties, I would assist them, but I would not 'hand the solution to them on a platter.' My goal was for them to develop independently... I provided 'behind-the-scenes' guidance to help them complete the project"* (P10).

An additional significant benefit for students involved in eTwinning projects is the development of their digital skills. According to participants, *"students cultivate skills related to New Technologies and, more broadly, 21st-century skills through their engagement with eTwinning projects"* (P1), and *"in the implementation of such projects, students significantly improve their digital skills, as they primarily engage with digital applications"* (P5). Furthermore, through the execution of eTwinning projects, students have the opportunity to enhance their alternative thinking. As noted, *"eTwinning projects greatly assist students in thinking alternatively"* (P3), and *"through eTwinning, students have the opportunity to explore alternative approaches to academic subjects as they are taught in different educational systems"* (P6).

4. DISCUSSION

This study aimed to explore the views of primary education teachers regarding the contribution of eTwinning projects to the development of students' linguistic, communicative, and collaborative skills. Additionally, it examined the factors that teachers recognize as crucial during the design and implementation of these projects for enhancing the aforementioned skills.

The responses of the teachers in the study clearly highlight the multiple benefits derived from the implementation

of eTwinning projects. Specifically, the benefits identified by the teachers include acceptance and respect for diversity, the development of linguistic skills, the enhancement of digital skills, the encouragement of communication and collaboration, and the cultivation of students' alternative thinking through their participation in eTwinning projects. Similarly, Prieto and Escobar (2017) emphasize that students' participation in eTwinning projects fosters their autonomy, improves their digital skills, and promotes communication and collaboration, thereby enhancing their linguistic, communicative, and collaborative skills. Additionally, Kampylis et al. (2012) highlight the extensive use of ICT by students within the framework of eTwinning projects. Furthermore, students' participation in such projects significantly strengthens their imagination and creativity, particularly when a familiar and friendly atmosphere prevails in the classroom (Cunningham, 2008).

The teachers in our research highlight various methods for developing students' language skills through their participation in eTwinning projects, with a focus on speaking, writing, listening, and reading skills. Regarding students' speaking skills, it is demonstrated that aligning the content of eTwinning projects with students' daily lives and interests is essential. Additionally, to encourage oral expression, it is important that the activities designed and implemented are tailored to the learning level of the class.

Concerning the methods for developing students' writing skills during their participation in eTwinning projects, teachers emphasize the importance of collaborative writing, encouraging individual expression, and creating shared documents. They particularly stress that writing activities should be closely linked to real-life experiences and students' everyday lives, as this connection helps them feel more at ease with the writing process. This observation is consistent with Ulu's (2019) research, which highlights the improvement of students' writing skills within familiar and relatable learning environments.

The development of students' listening skills through their participation in eTwinning projects can be significantly supported by continuous interaction and communication, both individually and collectively, through observation and practical application. Another approach to fostering these skills, as highlighted by the teachers in the study, is the incorporation of auditory materials into the teaching of eTwinning projects. According to Amin et al. (2018), integrating auditory resources into teaching can improve students' language abilities, particularly their comprehension of spoken and written discourse.

The responses of the participants in our study reveal several key factors they consider during the design and implementation of eTwinning projects, which they regard as essential for enhancing students' language skills. They emphasize the importance of tailoring teaching and activities to the age group, learning level, and abilities of the students. Additionally, some participants highlight that aligning the subject matter of eTwinning projects with the content of school curriculum guidelines is another critical factor for fostering students' language skills. This alignment creates learning "continuity" between classroom instruction and eTwinning project activities, which,

over time, leads students to achieve higher levels of understanding of the subject matter (Liapi et al., 2023). Another factor teachers take into account to ensure that an eTwinning project contributes to the enhancement of students' language skills is the design of activities that promote collaboration and communication within student workgroups. Interaction among students in these groups strengthens their language skills, both in their native language and in the communication language, designated by the collaborating members for the specific eTwinning project (Pakula, 2023).

In relation to the methods for developing students' communication skills during their participation in eTwinning projects, the teachers in the study emphasize that encouraging students to use gestures, signals, and eye contact during their interactions—both within classroom workgroups and in their communication with eTwinning project partners—enhances their nonverbal communication skills. The use of nonverbal communication contributes significantly to the understanding of the content of learning objectives, making it an essential factor in strengthening students' knowledge and skills (Bunglowala & Bunglowala, 2015).

The responses of the research participants indicate that the development of students' verbal and oral communication skills involved in eTwinning projects is facilitated through the oral presentation of information about their daily lives. Students' interaction for the exchange of information takes place within the digital environment of TwinSpace, which provides various tools and services aimed at fostering direct and continuous communication among collaborators (Blazic & Verswijvel, 2017).

With respect to the enhancement of students' written communication skills during the implementation of eTwinning projects, the teachers involved in the research emphasize that an effective way to improve these skills is through collaboration among students within the class and with students from partner schools to create poems co-created by students, fairy tales, and stories. Many teachers in the study highlight that a significant factor determining the selection of appropriate collaborative activities is the students' learning level and age.

With regard to the factors that teachers consider when designing and implementing eTwinning projects, which are perceived as contributing to the enhancement of students' communication skills, it is evident that such projects must also be tailored to the students' learning levels. Another important factor is the alignment of the learning content with the daily lives, preferences, and interests of the students participating in the eTwinning projects, which is feasible given that these aspects often constitute the thematic focus of eTwinning projects (Leto, 2018). Finally, to strengthen students' communication skills, teachers also emphasize the importance of creating a familiar and supportive environment for students, enabling them to interact within the classroom and communicate with students from partner schools. The creation and maintenance of a familiar and safe classroom atmosphere effectively promote student engagement and interest, while also providing opportunities for knowledge acquisition and skill development (Cheng, 1994).

The responses of the teachers in the study also reveal that systematic and methodical communication and interaction with partners during the implementation of eTwinning projects are essential for enhancing students' collaboration skills. Based on these observations, students can develop their collaborative skills both at the classroom level and at the international level. Furthermore, the eTwinning digital platform encourages students to strengthen their collaborative skills by utilizing the digital tools and services available within the virtual environment of TwinSpace (Papadakis, 2016). It is also important to note that collaboration among students of different ages in the implementation of eTwinning projects fosters interaction and communication between partner schools, thereby enhancing students' initiative and critical thinking skills (Gajek, 2009).

Teachers report that when designing and implementing an eTwinning project, they consider encouraging students to take initiatives and foster a willingness to cooperate within work groups, as these elements are seen as contributing to the enhancement of students' teamwork skills. Interaction within groups promotes student cooperation, strengthens initiative-taking, and sharpens students' critical thinking skills (Prieto & Escobar, 2017). Furthermore, based on the responses of the teachers in the study, it is evident that they also consider assigning "roles" to students participating in both group and individual activities conducted in eTwinning projects. They ensure that the assigned roles align with students' preferences, interests, and aptitudes, thereby contributing to the effective implementation of the eTwinning projects.

CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

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