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Research Paper

Expectations of Turkish and Italian Student Teachers Regarding eTwinning Activities

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ABSTRACT
This qualitative phenomenological study designed as a descriptive and exploratory investigation focusing on the expectations of undergraduate students from the education faculties of Türkiye and Italy about an online eTwinning Initial Teacher Education (ITE) project conducted in the 2023-2024 academic year. Written reflections by 42 participants were collected during the project onset. The analysis highlighted the multifaceted and culturally nuanced motivations of Turkish and Italian student teachers engaging in ITE project. The findings underscored the importance of recognizing both shared and divergent priorities in teacher education across national contexts, particularly within the framework of digitally mediated and project-based learning environments.

INTRODUCTION

The COVID-19 pandemic has significantly transformed the landscape of education, accelerating the integration of digital tools and highlighting the urgent need for flexible, innovative, and resilient teacher education systems (OECD, 2021; 2020; Caena & Redecker, 2019). As face-to-face interactions became limited, online platforms gained unprecedented relevance in fostering collaboration and continuity in teaching and learning (OECD, 2023; Kampylis et. al., 2015). In this context, eTwinning, an initiative of the European Commission under the Erasmus+ program has emerged as a significant tool for partnerships of initial teacher education institutions and a critical resource for teachers, teacher educators and student teachers enabling them to develop digital pedagogies, intercultural competencies and collaborative teaching strategies (EC, 2023; 2013; Eurydice, 2021).

The pandemic underscored that teacher preparedness for digital teaching is no longer optional but essential. During this period, many ITE institutions struggled to provide student teachers with real-life classroom experiences, while initiatives like eTwinning offered an alternative, practice-oriented model for international and project-based learning (Tosi, 2023; La Marca & Gülbay, 2021). Through alternative platforms, students and teachers could engage in meaningful collaboration, design interdisciplinary projects, and participate in reflective dialogue with peers from different cultural contexts, thus enriching their pedagogical repertoire in a time of disruption (Ibrahim vd. 2023). The European School Education Platform has emerged as an indispensable component among the models for initial teacher education (ESEP, 2020). Specifically, eTwinning for future teacher initiative, participants, despite being in different geographical locations, communicate via digital tools, share information, and co-create products (EC, 2023). In this respect, eTwinning aligns with key principles of distance education, such as independent learning, digital interaction, and freedom from time and space constraints.

Designed to promote collaboration and creativity through digital tools, eTwinning serves not only as a means of collaboration and communication but also as a space for the implementation of innovative teaching practices (Gabbi vd., 2022). In this study, collaboration is understood as a social process of knowledge building in which people work together towards clear objectives, resulting in well-defined final products, consensus, or decisions (Child and Shaw, 2016). Creativity refers to the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others (Franken, 1994). Professional development is an ongoing process that supports continuous development of practice throughout the whole of a teacher's career (Mishra and Koehler, 2006). These concepts form the conceptual foundation of this study, guiding the interpretation of student teachers' experiences in the eTwinning context.

Furthermore, the importance of integrating eTwinning into ITE has been increasingly emphasized in annual conferences and reports focusing on the future of teacher education in Europe (EC, 2020, 2021, 2022, 2023, 2024). Such initiatives have consistently underlined the need to embed digital collaboration and global values into teacher preparation (EC, 2023a). These initiatives highlight the potential of digital platforms to serve as a bridge between theory and practice, equipping future teachers with the skills to navigate complex educational environments, both during crises and in everyday school life. "eTwinning for Future Teachers" brought together Initial Teacher Education (ITE) institutions from European countries to include eTwinning in their teacher education activities. The aim is to grow the initiative sustainably, providing teacher educators and student teachers

with the online education experience so that they can benefit from an international community of professionals with the opportunity to share innovative pedagogical methodologies with their peers through a common educational framework based on the core EU values as human rights, freedom, democracy, equalty and the rule of law.

While the impact of eTwinning has been extensively documented at the primary and secondary school levels, its integration into Initial Teacher Education (ITE) programs remains relatively limited (Tosi, 2023). Yet, preparing student teachers for the realities of 21st-century classrooms requires more than theoretical coursework; it demands experiential learning opportunities that support the development of reflective practice, digital competence, and collaborative teaching skills. Embedding eTwinning into ITE offers such opportunities by enabling teacher candidates to engage in real-time project-based learning experiences in transnational contexts. These experiences can enhance professional identity formation, strengthen pedagogical adaptability, and contribute to more inclusive and innovative education systems (Paz-Albo & Cirugeda, 2017; Gülbay, 2018; Saunders ve Shimi, 2021; 2021a; Gabbi vd., 2022; Milkovic vd., 2023; Vega vd., 2023). The "eTwinning for Future Teachers" initiative was launched by encouraging collaboration among ITE institutions across Europe to address this need. As education systems continue to recover and reimagine their futures post-pandemic, integrating eTwinning into ITE has offered a sustainable and impactful way to empower a new generation of teachers. It not only supports the development of 21st-century competencies but also strengthens the European dimension of education, fostering a sense of professional identity rooted in collaboration, innovation, intercultural communication and inclusivity (Tosi, 2023, Göçen vd. 2025).

Within the framework of this model, teacher educators and student teachers from two different faculties of education in Türkiye and Italy have come together to initiate a collaborative eTwinning project within a dynamic learning environment. As the first phase of the project, the participants aimed to explore the expectations, motivations, and perceived benefits of student teachers regarding their engagement in eTwinning activities. This study not only seeks to enhance the pedagogical and digital competencies of future educators but also aspires to contribute to the existing literature by analyzing the participants' initial perceptions and expectations. By evaluating these expectations, the article aims to offer insights into the potential of eTwinning practices in teacher education.

Purpose of the Study

The goal of this study is to identify the motivations, goals, interests, and expectations of student teachers during the project onset. For this reason, the study will focus on the choices made and the discursive features reflected in the form. Research questions are as follows:

(RQ1): Which competencies do student teachers aim to develop the most during the project process?
(RQ2): Which topics do student teachers prefer to discuss and learn about throughout the project?
(RQ3): What are the preferred modes of working (individually, with a partner, or in a group) for student teachers during the project?
(RQ4): What are the expectations of student teachers from teacher educators regarding learning methodologies during the project?
(RQ5): What kind of tasks or roles do student teachers prefer to undertake within the scope of the project?
(RQ6): What are the expectations of student teachers from the overall project process?
(RQ7): What are the primary motivations of student teachers for participating in the project?

METHODOLOGY

The primary objective of this research was to explore and analyze the perspectives, motivations, expectations, and learning preferences of student teachers who engaged in coursework integrating social projects and eTwinning-based modules. Therefor in this study a phenomenological approach was preferred in order to understand participants' expectations and motivations for the project process, conducted within the framework of a collaborative, project-based learning initiative, designed as part of the eTwinning program for teacher education at two higher education institutions: İstanbul University-Cerrahpaşa (IU-C) in Türkiye and Università Cattolica del Sacro Cuore (UNICATT) in Italy. Phenomenology is a qualitative research design that aims to focus on individuals' experiences and the meanings they attribute to those experiences (Creswell vd. 2007; Neubauer, 2019).

Participants

The sample consisted of student teachers who were enrolled in a social project and/or eTwinning course within a faculty of education, were undergraduate students. The total number of participants was 42, with equal representation from both partner institutions (n = 21 from IU-C; n = 21 from UNICATT). This balance allowed for a cross-cultural comparison of participants' experiences, competencies they aimed to develop, and their preferences related to the project implementation process. To ensure the confidentiality and anonymity of participants' personal data, each participant was assigned a unique identification code based on their country and a sequential number (e.g., TR01 for participants from Türkiye and IT01 for participants from Italy). This coding system was used throughout the data analysis and reporting processes to protect individual identities while allowing for country-based comparisons.

Data Collection

Data for this study were collected through a structured questionnaire (Appendix 1) designed to capture both quantitative and qualitative insights into the experiences and expectations of the participating student teachers. The questionnaire consisted of a total of seven items: four closed-ended (multiple-choice) questions and three open-ended questions developed by the authors. The closed-ended items were designed to identify trends and preferences in participants' project-related choices, while the open-ended items aimed to elicit more in-depth reflections regarding their motivations and expectations. Data were collected at 03 November 2023 through a semi-structured survey form (Appendix 1) to explore participants' experiences and expectations in depth. Form questions were developed by the teacher educators of the ITE project. There was an introduction to the study in the initial online meeting, followed by the form being sent to Italian and Turkish participants by email. The responses were asked to be given in English through email.

Data Analysis

Following the data collection phase, all responses were systematically transferred into Microsoft Excel for organization and analysis. Quantitative data were analyzed using frequency counts, which allowed for a clear visualization of common patterns and tendencies across the sample. Given the exploratory nature of this study and the relatively small sample size, the analysis focused on descriptive statistics (frequency counts and percentages) rather than inferential tests. The primary aim was to identify patterns and tendencies in the expectations and preferences of Turkish and Italian student teachers, rather than to test statistically significant differences between groups. This descriptive approach aligns with the study's purpose of providing contextualized insights into participants' experiences and perceptions within the eTwinning project framework. For the qualitative data analysis 42 written reflections were coded inductively, meaning that codes emerged directly from participants' own words without pre-established categories. Two researchers conducted the analysis collaboratively to enhance the study's trustworthiness. For the analysis of the data it was benefited from Braun and Clarke's (2006) six-phase framework. The integration of both quantitative and qualitative data allowed for a more comprehensive understanding of the participants' perspectives, enriching the overall interpretation of the findings.The study was designed and implemented by the same researchers who served as project facilitators. This dual role allowed the researchers not only to observe and collect data at the project onset but also to engage in a dynamic, practice-based inquiry with the participants. The authors acknowledge their dual role as both project facilitators and researchers, which may have influenced data collection and interpretation. To minimize potential bias, independent coding of qualitative data was carried out by two researchers, and coding discrepancies were discussed until consensus was reached. Correspondences were made via email. The participants, in turn, were not merely subjects of research but active collaborators who contributed meaningfully to both the project activities and the co-construction of data through reflective dialogue and feedback mechanisms.

FINDINGS

F1. The competencies student teachers aim to develop during the project process

In the study, project participants were asked about the competencies that they most wanted to develop during the project process. Figure 1 illustrates the competencies that student teachers from Türkiye and Italy most wish to develop during a project. Each participant was asked to select up to three competencies. The data offers valuable insights into cross-cultural priorities in teacher education and professional development.

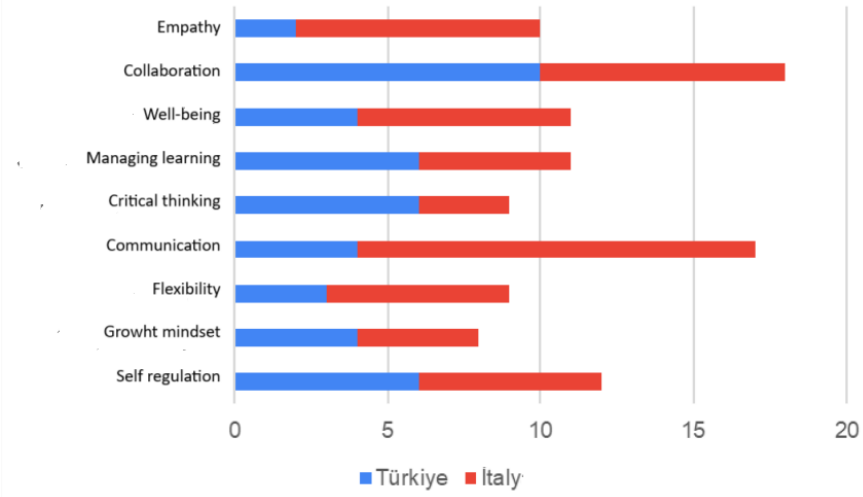

Figure 1. Competencies that Student Teachers Most Wanted to Develop During the Project Process

The most notable outcome is the Italian student teachers' strong emphasis on "Collaboration" and "Communication", which were selected by 18 and 16 participants, respectively. This suggests a pedagogical focus on interpersonal and cooperative skills,

aligning with contemporary educational approaches that emphasize teamwork and co-creation in learning environments. “Empathy”, “Well-being” and “Flexibility” were also highly valued by Italian participants, reflecting a holistic perspective on teaching competence that integrates emotional intelligence and adaptability. In contrast, Turkish student teachers showed a more balanced distribution across competencies, though their top preferences included “Critical Thinking”, Self-regulation” and “Managing learning”. This indicates a stronger orientation towards internal, reflective competencies that support self-directed learning and cognitive development. These selections suggest that Turkish participants may be more focused on intrapersonal skills crucial for resilience and autonomous learning in dynamic educational settings. Interestingly, both groups placed relatively lower emphasis on “Growht mindset” despite its recognized importance in inclusive and responsive teaching practices.

F2. Student teachers’ preferred topics for discussion and learning

Project participants were asked to select up to three topics that student teachers from Türkiye and Italy most prefer to discuss and learn about. Figure 2 reflects both similarities and divergences in the educational and cultural priorities of student teachers in the two countries. According to the findings, Italian student teachers demonstrated a markedly higher interest in cultural topics compared to their Turkish counterparts, with “Culture” being selected by 16 participants from Italy, whereas about 12 participants from Türkiye chose it. Similarly, “Music” and “Art” emerged as the significantly most popular among Italian participants, indicating a strong inclination towards creative and expressive disciplines. On the other hand, Turkish student teachers showed greater interest in “Politics,” “History,” and “Technology.” For instance, “Politics” was exclusively selected by Turkish participants, while “History” was chosen by more Turkish than Italian respondents. This suggests that Turkish student teachers may be more attuned to structural, informational, and civic domains in their educational focus. Interestingly, both groups showed relatively low interest in “Social Issues” and “Well-being,” despite global emphasis on sustainability and mental health in education. This trend may highlight a potential gap in awareness or prioritization of these topics within teacher training curricula in both countries.

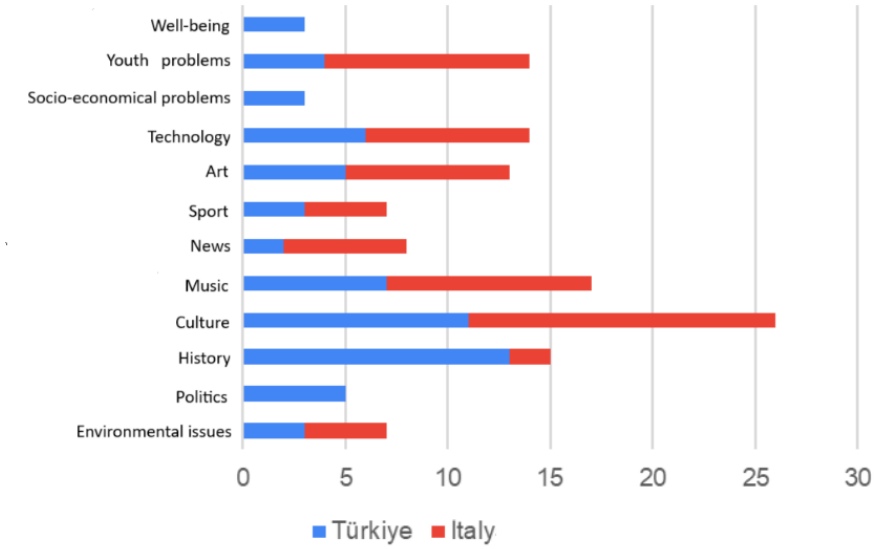

Figure 2. Student Teachers’ Preferred Topics for Discussion and Learning

F3. Student teachers’ study preferences

Participants were asked to indicate whether they prefer working alone, with a partner, or in a team or group. The responses reveal significant cross-cultural differences in collaborative tendencies and individual work preferences. Figure 3 presents the preferences of student teachers from Türkiye and Italy during a project-based learning process. The most prominent trend in the data is the strong preference among Italian student teachers for working in a team or group setting. A substantial number of Italian participants selected this option, far outnumbering their Turkish counterparts. This suggests a cultural and pedagogical orientation toward collaborative learning and co-construction of knowledge in Italian teacher education programs. Such a tendency may stem from broader educational traditions in Italy that prioritize social learning, peer exchange, and group reflection. In contrast, Turkish student teachers exhibited more diverse preferences. While many also expressed an interest in working with a partner or in a group, a notable portion indicated a preference for working alone. This highlights a comparatively higher inclination toward individual work among Turkish participants, possibly reflecting differences in prior educational experiences, autonomy in learning styles, or perceived efficacy when working independently. Interestingly, both groups showed a relatively balanced interest in working with a partner, though the number of Turkish participants choosing this option was slightly higher. This may indicate a shared appreciation for collaboration in a dyadic context, where responsibilities and communication are more manageable than in larger group settings.

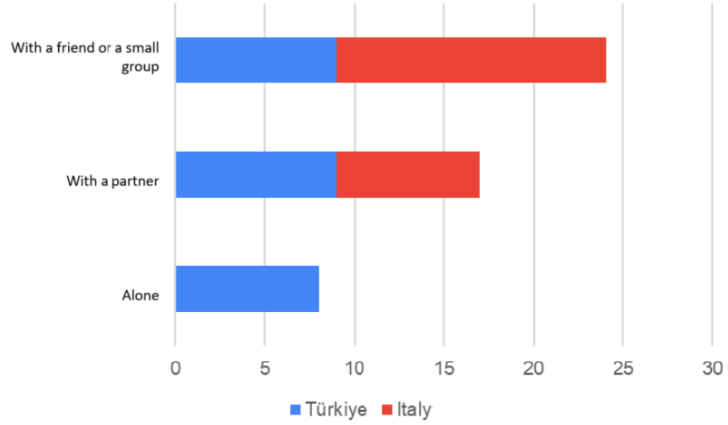

Figure 3. Student Teachers' Work Preferences During the Project Process

F4. Student teachers' expectations regarding learning methodologies

Participants were asked to indicate their expectations regarding learning methodologies used by teacher educators (TEs). Figure 4 illustrates the top four preferred methods selected by participants from both countries. A comparative analysis reveals significant differences and similarities between the two contexts. One of the most striking findings is the high preference among Italian participants for the use of diverse materials such as videos, music, and the internet, as well as for methods that make learning enjoyable (e.g., through games, puzzles, and humor). This suggests that Italian student teachers value multimodal, engaging, and playful instructional approaches, emphasizing creativity and learner-centered strategies. In contrast, Turkish participants expressed a stronger preference for methodologies that promote creativity and allow autonomous exploration. Notably, "being allowed to be creative" and "being helped to discover things on my own" were more frequently selected by Turkish respondents, indicating a desire for pedagogical approaches that foster independence and innovation.

Both groups showed moderate interest in methods that involve explaining the reasons behind actions, sharing experiences, and offering encouragement. However, Italian participants gave more weight to encouragement and constructive feedback, while Turkish participants emphasized fairness in classroom rules and visible enthusiasm in teaching. Interestingly, certain practices such as making learning relevant to students' lives or encouraging collaborative work were not among the most selected preferences, particularly by Turkish respondents. This may point to a need for increased emphasis on contextualization and cooperation within teacher training programs in Türkiye. Besides, when teacher educators introduced challenging learning experiences, it was observed that, except for a few student teachers from Italy, the approach was not widely favored. This may indicate that the teacher education system does not sufficiently promote 21st-century skills such as critical thinking, problem-solving and resilience, as student teachers tend to avoid challenging learning environments.

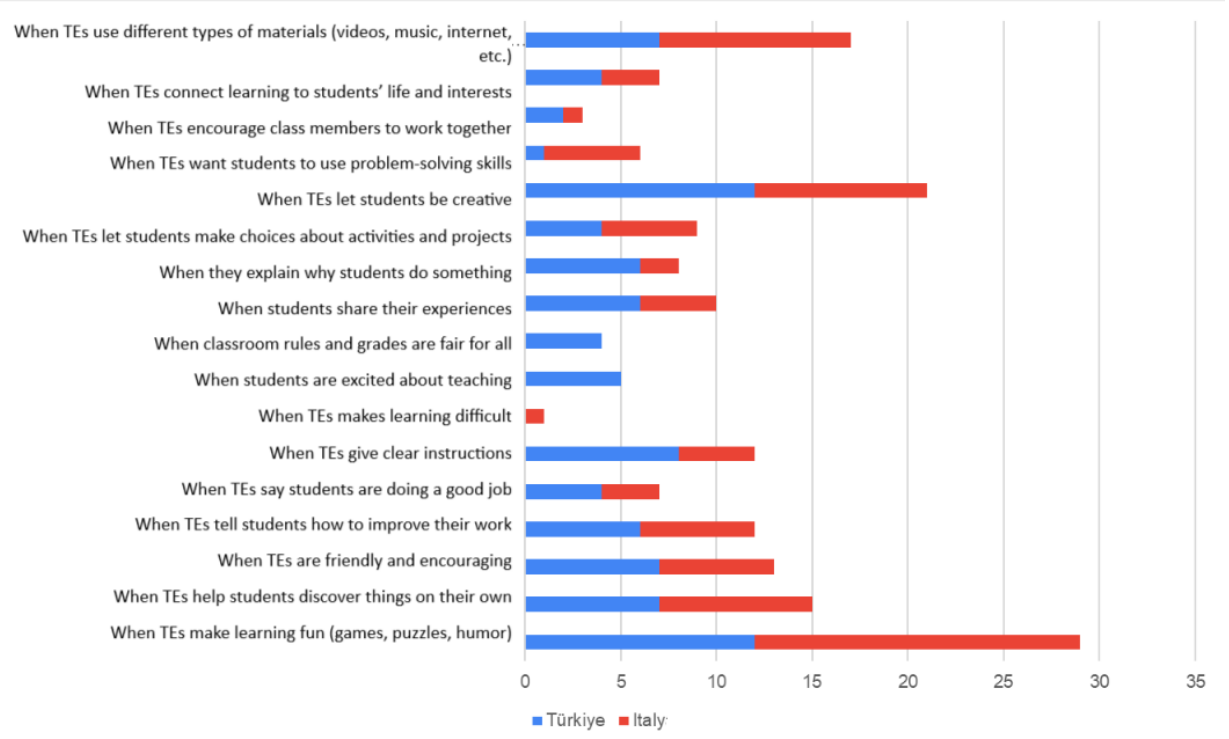

Figure 4. Student Teachers' Expectations Regarding Learning Methodologies

F5. Student teachers' preferred tasks and roles within the scope of the project

The responses provided by Turkish student teachers regarding the tasks and roles they prefer to undertake in the project process reveal a multidimensional approach to professional development. The thematic analysis identified several key areas of interest, which reflect both individual growth aspirations and collaborative working preferences, shown in Table 1. The thematic coding of their open-ended responses yielded eight primary categories: collaboration and teamwork, communication skills, personal and professional development, digital competence and EdTech use, creativity and innovation, social responsibility and engagement, project management and strategy, and instructional design and material creation.

Table 1. Tasks and Roles Preferred by Turkish Student Teachers (n = 21)

Theme	Subthemes / Keywords	Frequency
Collaboration and Teamwork	Group work, cooperation, task sharing, empathy, active participation	10
Communication Skills	Social interaction, verbal communication, expressing ideas, self-control	8
Personal and Professional Development	Curiosity, interest, self-improvement, responsibility, overcoming introversion	7
Digital Competence and EdTech Use	Using tools like Canva, Kahoot, and Wordwall; engaging in digital environments	5
Creativity and Innovation	Generating ideas, using creative tools, innovation	4
Social Responsibility and Engagement	Desire to take part in social projects, future-oriented civic involvement	4
Project Management and Strategy	Planning, observing progress, strategic thinking, task division	3
Instructional Design & Material Creation	Preparing teaching materials, integrating technology in lesson planning	2

According to Table 1, nearly half of the participants (f =10) expressed a strong inclination toward collaboration and teamwork, emphasizing the importance of group work, cooperation, active participation, and empathy. This suggests that participants recognize the project as a social learning environment where peer interaction and co-construction of knowledge are central to their engagement. For example, one participant (TR5) reflected as *"through the project, I think I can enhance my skills in group communication, task distribution, strategy development, planning, and cooperation."* Another prominent theme was communication skills, highlighted by 8 of the respondents. These participants aimed to improve their verbal expression, social interaction and ability to share ideas effectively within a group. This emphasis aligns well with the demands of contemporary teacher education, which requires strong interpersonal skills in multicultural and multilingual educational contexts. For example, one participant (TR4) stated as *"for me, the project is important in improving my ability to collaborate and strengthening my communication skills within social groups."* Approximately one-third (f =7) of the student teachers emphasized personal and professional development, including self-improvement, overcoming personal barriers (such as introversion), and cultivating a sense of responsibility. This highlights the reflective dimension of their learning, where the project is not only seen as an academic task but also as a means of building confidence. For example one participant (TR7) shared as *"I want to improve myself personally and socialize and overcome my introversion".* Digital competence and the use of educational technologies were also cited by 5 of the participants, indicating growing awareness of the need for digital literacy in 21st-century classrooms. Participants specifically mentioned their interest in using digital tools, which support both engagement and innovation in teaching practices. For example, one participant (TR18) stated as: *"I want to learn how to use innovative tools like Wordwall, Kahoot and Canva and use them effectively".* Other less frequently but notably mentioned themes included creativity and innovation (f =4) social responsibility (f =3), and project planning and strategy (f =2) Although these were not the most dominant categories, they reflect the participants' readiness to engage in complex, forward-looking tasks such as designing social projects and managing learning processes.

The responses provided by Italian student teachers regarding the tasks and roles they prefer to undertake in the project process reveal a multidimensional approach to professional development. The thematic analysis identified several key areas of interest, which reflect both individual growth aspirations and collaborative working preferences, shown in Table 2. The thematic coding of their open-ended responses yielded seven primary categories: improving English language skills, intercultural communication and networking, collaboration and teamwork, innovative teaching methods, personal development, digital and educational tools, and professional growth as future teachers.

Table 2. Tasks and Roles Preferred by Italian Student Teachers (n = 21)

Theme	Keywords/Statements	Frequency
Improving English Language Skills	Developing fluency, confidence, and competence in English	10
Intercultural Communication & Networking	Meeting new people, understanding other cultures, building international ties	9
Collaboration & Teamwork	Working in groups, cooperation with peers, collective participation	8

Innovative Teaching Methods	Interest in outdoor education, storytelling, creative methods	6
Personal Development	Becoming more courageous, managing time, organizing activities	5
Digital & Educational Tools	Learning new tools and digital resources for teaching	4
Professional Growth as Future Teachers	Gaining teaching experience, preparing for international projects	4

According to Table 2, the desire to improve English language skills is foremost among these themes, which was cited by nearly half of the participants (f = 10). This reflects the strong motivation among Italian teacher candidates to enhance their linguistic competence, particularly in real-world, communicative settings. The emphasis on English language development aligns with the broader objectives of international educational projects, which often prioritize language immersion and cross-cultural communication as integral components of teacher education. For example, one participant (IT11) stated as "*I want to be more brave to speak in English with others".* Closely following is the theme of intercultural communication and networking (f = 9), highlighting the participants' enthusiasm for engaging with peers from different cultural backgrounds. This finding is consistent with the literature on global citizenship education, which underscores the role of intercultural experiences in fostering openness, empathy, and cultural sensitivity among future educators. The participants appear to value these interactions not only for personal enrichment but also as a foundation for inclusive classroom practices. For example, one participant (IT8) reflected as "*I want to know people of another countries and communicate".* The theme of collaboration and teamwork (f = 8) was also prominent, indicating that the teacher candidates are aware of the significance of cooperative learning approaches. Their responses suggest an appreciation for participatory roles that require shared responsibilities and mutual support, which are essential qualities in both initial teacher education and professional practice. For example, one participant (IT8) shared as *"I want to deal with other colleagues and find more useful teaching methods".* Another noteworthy trend is the interest in innovative teaching methods, including outdoor education and storytelling (f = 6). These responses suggest that student teachers are keen to explore creative, student-centered pedagogies that go beyond traditional classroom routines. This reflects a growing pedagogical shift toward experiential and contextual learning, reinforcing the importance of exposing teacher candidates to diverse instructional approaches during their training. For example, one participant (IT18) reflected as *"I am interested in outdoor training and storytelling activities".* In terms of personal development (f = 5), several participants emphasized goals such as becoming more confident, improving time management, and being better organized. These aspirations indicate that participants view the project experience as a valuable space for self-growth and the development of soft skills that contribute to overall teaching effectiveness. Additionally, some responses focused on acquiring digital and educational tools (f = 4), revealing an awareness of the importance of technological integration in modern education. Given the increasing reliance on digital resources in teaching, this finding underscores the need to include ICT training within teacher preparation programs. Lastly, a smaller yet significant number of participants (f = 4) expressed interest in professional growth, especially about preparing for international teaching opportunities and enhancing their readiness to lead future projects. This indicates that the participants are forward-thinking and motivated to expand their professional competencies in alignment with the demands of contemporary, globally connected education systems.

The comparative analysis of the tasks and roles preferred by Turkish and Italian student teachers reveals both converging priorities and distinctive tendencies shaped by cultural, educational, and linguistic contexts. A key similarity across both groups is the strong emphasis on improving collaboration and communication skills, including English learning as a second language which was the most frequently cited theme among the Italian participants and also prominently mentioned by Turkish student teachers. For both cohorts, English proficiency is not only seen as a tool for communication during the project but also as a critical skill for their future careers as educators in a globalized world. This shared motivation highlights the perceived value of international projects as authentic language learning environments. Furthermore, both groups demonstrated a high level of interest in teamwork. Italian student teachers frequently expressed their desire to work in groups and build connections with peers from other countries, while Turkish participants similarly prioritized roles involving coordination, organization, and co-creation. These preferences align with current trends in teacher education that emphasize cooperative learning, peer dialogue, and co-construction of knowledge. Despite these similarities, several notable differences emerged. For instance, Italian student teachers placed greater emphasis on intercultural communication and personal development. Many expressed enthusiasms for meeting people from other cultures, developing life skills such as self-confidence and open-mindedness, and engaging in reflective learning through experiential methods such as outdoor education and storytelling. Their responses suggest a holistic view of the project experience as a pathway for both pedagogical and personal transformation. In contrast, Turkish participants were more likely to articulate concrete and task-oriented preferences, such as designing educational content, developing materials, managing social media, or taking on project coordination roles.

F6. Student teachers' expectations from the project process

The responses provided by Turkish student teachers regarding their expectations from the project process reveal a multidimensional approach to professional development. The thematic analysis identified several key areas of interest, which reflect both individual growth aspirations and collaborative working preferences, shown in Table 3. The thematic coding of their open-ended responses yielded eight primary categories: project development and management, collaboration and group work, use of technology in education, professional and academic development, material and content design, intercultural and peer learning, awareness of youth and social impact of the subject, awareness of current issues.

Table 3. Expectations of Turkish Student Teachers from the Project Process (n = 21)

Theme	Keywords/Statements	Frequency
Collaboration and Group Work	Group work, collaboration, teamwork, communication	5
Professional and Academic Development	The relationship between profession and hobbies, subject-specific skills, awareness of what has been learned, academic writing, discipline-related programs	5
Project Development and Management	How to develop a project and what steps are involved in the development process.	3
Use of Technology in Education	Collaborative work using technology, preparing digital content, making effective use of technology	3
Awareness of Youth and Social Impact of the Subject	Youth perspectives on Social Studies education, The contribution of social projects to well-being	2
Material and Content Design	Instructional materials and material design	1
Intercultural and Peer Learning	Experiences of students from different countries	1
Awareness of Current Issues	Current events and projects	1

According to Table 3, the most frequently mentioned themes were collaboration and group work and professional and academic development, each cited by five participants. These findings suggest that student teachers place strong emphasis on working effectively with peers and teams, as well as improving their academic and professional skills. Statements such as "working with a team," "cooperation," and "awareness of learned skills" indicate a desire for both interpersonal growth and self-reflection within their field of study. Project development and management and use of technology in education were each mentioned by three participants. These responses highlight the participants' interest in understanding how to design and manage educational projects, particularly by integrating digital tools. Student teachers expressed a wish to gain practical knowledge in areas such as "collaborative work using technology" and "preparing digital content," reflecting the growing importance of technological competence in modern education. Less frequently mentioned themes included awareness of youth and social impact of the subject, material and content design, intercultural and peer learning, and awareness of current issues. While these themes had lower frequencies, they still reveal valuable insights. For example, participants showed an awareness of the societal role of Social Studies and the potential for intercultural learning through interaction with peers from different countries.

The responses provided by Italian student teachers regarding their expectations from the project process reveal a multidimensional approach to professional development. The thematic analysis identified several key areas of interest, which reflect both individual growth aspirations and collaborative working preferences, shown in Table 4. The thematic coding of their open-ended responses yielded six primary categories: collaboration and group work, communication and language skills, intercultural awareness and learning, use of technology and methodologies, outdoor and creative education, personal and professional development.

Table 4. Expectations of Italian Student Teachers from the Project Process (n = 21)

Theme	Keywords/Statements	Frequency
Communication and Language Skills	communication skills, speak English, improve my English, foreign language learning, communicative ways, language acquisition	7
Collaboration and Group Work	collaborate with students and teachers from different countries, my capacity to collaborate, ability of collaboration, teamwork, managing learning	6
Intercultural Awareness and Learning	new cultures, different countries, experience different classroom environment, different timing and resources, foreign country music	5
Use of Technology and Methodologies	active ways using technologies, online resources, new tools, methodologies, new methods of teaching	4
Outdoor and Creative Education	outdoor education, storytelling, arts, sports, music, creative approaches	5
Personal and Professional Development	life skills, opens up new opportunities, flexible approach, development of skills	4

The analysis of the expectations expressed by 21 Italian student teachers reveals key themes that highlight their aspirations for both personal and professional growth through international educational experiences. The most frequently mentioned theme was communication and language skills (f = 7), with participants expressing strong interest in improving their English proficiency and enhancing their ability to communicate effectively across linguistic boundaries. Statements such as "*to speak English with other people*," "*improve my English language*," and "*foreign language learning*" suggest a perceived need to develop communicative competence as a core element of their participation in the project. The second most prominent theme was collaboration and group work (f = 6), emphasizing the importance of teamwork, peer interaction, and the ability to collaborate with individuals from diverse cultural and educational backgrounds. Responses referring to "my ability of collaboration" and "collaborate with students and teachers from different countries" reflect the students' awareness of the collaborative nature of

international and interdisciplinary educational settings. Intercultural awareness and learning (f = 5) also emerged as a significant theme, highlighting student teachers' curiosity about cultural diversity and global perspectives. Interest in "experiencing a different classroom environment," "different types of music," and "new cultures" underscores their desire to engage in cross-cultural exchange, which aligns well with the goals of international teacher education programs. Another theme, outdoor and creative education (f = 5), included references to "outdoor education," "storytelling," "arts," "sports," and "music." This suggests that student teachers not only value formal learning but also recognize the importance of creativity and alternative educational environments in fostering holistic development. Use of technology and methodologies (f = 4) indicates a growing interest in innovative pedagogical approaches. Participants expressed interest in "active ways using technologies" "online resources" and "new tools" reflecting their willingness to explore and apply digital resources to support their teaching practices. Lastly, personal and professional development (f = 4) points to students' broader aspirations to gain life skills, flexibility, and increased self-awareness. Expectations such as "life skills," "a new flexible approach," and "how it opens up new opportunities" suggest that participants view the project as a platform for enhancing their readiness for diverse professional contexts.

The expectations of Turkish and Italian student teachers participating in the project process reveal both shared and distinct priorities shaped by their educational backgrounds, cultural contexts, and individual aspirations. A comparative analysis of the thematic data highlights overlapping interests in collaboration, communication, and professional growth, while also shedding light on specific emphases that differ between the two groups. One of the most prominent commonalities is the importance placed on collaboration and group work. Turkish student teachers and Italian student teachers alike emphasized the value of teamwork, cooperation, and effective communication with peers. Statements such as "group work" "collaboration", and "collaborate with students and teachers from different countries" underscore a shared recognition of the interpersonal and intercultural skills required in contemporary educational environments. Another area of convergence is the focus on professional and academic development. While Turkish participants emphasized discipline-specific competencies such as "field-related skills" and "text writing, Italian student teachers expressed broader developmental goals such as "life skills," "flexible approaches," and the desire for new teaching opportunities. Both groups view the project as a platform for enhancing their preparedness for future teaching roles. A notable difference arises in the emphasis on communication and language skills, which appeared far more frequently among Italian participants than Turkish ones. Italian students highlighted improving their English language proficiency, acquiring new language strategies, and engaging in communicative learning. In contrast, language development did not emerge as a dominant theme among Turkish student teachers, suggesting either differing language learning needs or a stronger existing proficiency level among the Turkish cohort. In terms of technology use in education, both groups showed comparable interest. Turkish student teachers noted their interest in using technology for digital content creation and collaboration, while Italian students mentioned "active ways using technologies" and "online resources." This reflects a shared awareness of the increasing role of digital tools in educational practices. Italian participants also showed a stronger inclination toward creative and alternative pedagogies, including outdoor education, storytelling, music, and arts, indicating a more holistic view of education that integrates cultural and experiential learning. In contrast, Turkish student teachers rarely mentioned creative or artistic content, with only isolated references to material and content design. Additionally, intercultural learning emerged as a more explicit theme among Italian participants, who frequently referred to learning from peers in different countries and exploring diverse educational systems. Turkish participants touched on intercultural aspects, but not to the same extent, potentially reflecting differences in international exposure or curricular focus. Finally, Turkish student teachers were more likely to express a specific awareness of their subject area's societal role, such as the contribution of social studies education to youth well-being and understanding of current events. This discipline-based reflection was largely absent in the Italian responses, which were more generalized in scope.

F7. Student teachers' motivations to join the eTwinning project

Drawing upon the categorized data on motivations of Turkish student teachers participating in the ITE Project, Table 5 reflects on key themes and their implications for teacher education. The thematic coding of their open-ended responses yielded six primary categories: collaboration and teamwork, professional development & field knowledge, technology and digital competence, creativity and productivity, intercultural experience & empathy, personal awareness & well-being.

Table 5. Motivations of Turkish Student Teachers for Participation (n = 21)

Themes	Keywords	Frequency
Collaboration and Teamwork	group work, cooperation, responsibility, communication in groups, working with peers	5
Professional Development & Field Knowledge	relationship between hobbies and profession, social studies skills, youth perspective, impact of social projects, subject-related tools	5
Technology and Digital Competence	collaborative work with technology, digital content creation, material design, effective tech use	4
Creativity and Productivity	writing skills, project development, awareness of learning, content creation	4
Intercultural Experience & Empathy	learning from international peers, empathizing with students' views on social studies	2
Personal Awareness & Wellbeing	self-awareness in learning, impact of projects on wellbeing	1

According to Table 5, the most frequently mentioned theme among participants is collaboration and teamwork (f = 5), emphasizing a strong desire to improve interpersonal and cooperative skills. Keywords such as "group work," "responsibility," and "peer communication" highlight the teachers' need to operate in collaborative environments. For example, one participant (TR3) stated as *"I participated in the project activity to benefit from the experiences of different students from different countries".* Equally prominent (f = 5) is the theme of professional development and field knowledge. Participants express motivation to explore the intersection of personal interests and professional identity, as well as to deepen their pedagogical and disciplinary knowledge, particularly in social studies education. For example, one participant reflected as *"I joined the project to better use my social studies skills".* Student teachers also show significant interest in technology and digital competence (f = 4), including using digital tools for collaboration and content creation. This motivation reflects broader trends in educational innovation and the necessity of digital fluency in modern classrooms. Closely related is the theme of creativity and productivity (f = 4), where participants aim to enhance their ability to write, create, and develop projects. While less frequently noted, intercultural experience and empathy (f = 2) remain essential motivational drivers. Participants mention the value of interacting with students from different countries and understanding diverse perspectives. Finally, the theme of personal awareness and well-being (f = 1) illustrates how participants also view projects as a means of self-growth. The connection between social project participation and well-being suggests that student teachers perceive professional engagement not only as a career obligation but also as a route to personal fulfillment and resilience.

Drawing upon the categorized data on motivations of Italian student teachers participating in the ITE project, Tablo 6 reflects on key themes and their implications for teacher education. The thematic coding of their open-ended responses yielded six primary categories: language acquisition, collaboration and teamwork, intercultural learning, use of technology in education, creative and experiential learning, and professional development.

Table 6. Motivations of Italian Student Teachers for Participation (n = 21)

Themes	Keywords/Statements	Frequency
Language Acquisition	English speaking, foreign language improvement, communication in English, project in English	8
Collaboration and Teamwork	collaboration with students and teachers, teamwork, group work, learning with a team	6
Intercultural Learning	learning about new cultures, international knowledge, working with people from other countries	4
Use of Technology in Education	online resources, flexible methodologies, active learning with tech	4
Creative and Experiential Learning	storytelling, outdoor education, arts, music, sports	4
Professional Development	teaching methods, project management, new tools for language teaching, job improvement	5

According to Table 6, the most prominent motivational theme among Italian participants is language acquisition (f = 8). Student teachers express a clear intention to improve their English-speaking skills and develop proficiency in foreign language communication, both for personal growth and professional application. The second most frequently cited motivation relates to collaboration and teamwork (f = 6). Participants show a strong interest in learning how to work effectively with both peers and students from other countries. Professional development (f = 5) is another strong motivational theme. Participants aim to enhance their teaching methods, explore new digital tools, and improve their overall instructional practices. The integration of project tasks as a way to "manage learning" and "improve job performance" indicates a recognition of the pedagogical value of experiential, project-based learning. A noteworthy motivation expressed by several participants concerns intercultural learning (f = 4). Italian student teachers show enthusiasm for learning about new cultures and increasing their international awareness. Closely connected to professional growth is the theme of use of technology in education (f = 4). Participants are motivated to engage with "online resources" "flexible methodologies" and "active learning strategies." These motivations signal a readiness to embrace digital pedagogy, which is increasingly critical in contemporary educational practice. Finally, creative and experiential learning (f = 4) appears as an emerging area of interest. Participants are particularly drawn to storytelling, outdoor education, and integrating the arts into their teaching. This motivation underlines a commitment to holistic, engaging, and inclusive educational experiences. It also indicates the importance of cultivating imagination and emotional intelligence in future educators.

Drawing upon qualitative responses from 21 participants from each country, thematic analysis reveals both converging and diverging patterns across several domains of professional growth and pedagogical engagement. Language development emerged as a primary motivational factor among Italian participants. A significant number expressed their desire to improve their English skills, particularly in terms of communication, vocabulary, and fluency. The opportunity to speak English with international peers and integrate the language into project-based tasks was perceived as a pathway to increased confidence and employability. In contrast, Turkish participants demonstrated limited emphasis on foreign language acquisition. Communication was valued, but mainly within the context of group dynamics and effective collaboration, rather than linguistic proficiency. Both Turkish and Italian student teachers showed strong motivation related to collaboration and teamwork. Turkish participants focused on the dynamics of group work, task-sharing, and learning to function effectively within a team. Italian participants echoed this interest but framed it within a more intercultural and adaptive context. Their responses highlighted the importance of negotiating different

working styles, timelines, and expectations across national boundaries, emphasizing flexibility and cultural responsiveness. Technology was another shared motivator, albeit framed differently across the two groups. Turkish participants were particularly motivated to create digital learning materials, integrate technology into social studies teaching, and design engaging content for their future classrooms. Italian participants, on the other hand, approached technology as a gateway to active learning and innovative pedagogy. They expressed interest in using online tools, multimedia, and interactive platforms to enrich the educational experience and expand their teaching repertoire. The desire for professional development was prevalent among both cohorts. Turkish participants were especially motivated to understand the processes involved in project design and implementation, including the strategic planning, content creation, and reflective practices necessary for educational innovation. Italian participants linked their motivation to the opportunity to explore new teaching methods, enhance classroom practice, and engage with contemporary educational trends, particularly through storytelling, outdoor education, and arts integration. Italian participants showed a stronger and more explicit interest in intercultural exchange and global awareness. They frequently mentioned the value of engaging with peers from different cultural backgrounds and learning about diverse educational systems. While Turkish participants also valued international exchange, their motivations were more pragmatically oriented toward content creation and classroom practice rather than cultural immersion. Finally, creativity and experiential learning were more pronounced in the responses of Italian participants. Themes such as outdoor education, storytelling, and the integration of music and art were frequently cited as areas of interest. Turkish participants mentioned creative material design and the enhancement of subject-specific skills, particularly in social studies, but less frequently emphasized experiential methodologies.

CONCLUSION

This study highlighted the multifaceted and culturally nuanced expectations and motivations of Turkish and Italian student teachers engaging in initial teacher education (ITE) eTwinning projects. The findings underscored the importance of recognizing both shared and divergent priorities in teacher education across national contexts, particularly within the framework of digitally mediated and project-based learning environments. Firstly, the eTwinning platform was seen as a powerful pedagogical tool that aligned with the affordances of distance education by fostering interactive, learner-centered, and collaborative educational processes. Its integration into teacher education not only facilitated communication and cooperation among student teachers across borders but also enabled the application of innovative instructional methodologies suited to the demands of the digital age. In relation to RQ1, student teachers indicated that the most important competencies they sought to develop were related to communication and colaboration. Participants from both groups placed relatively lower emphasis on *growht mindset* despite its recognized importance in inclusive and responsive teaching practices. Regarding RQ2, participants showed a high interest for discussing topics connected to *culture and history*. Participants from both groups showed relatively low interest in *social issues* and *well-being*, despite global emphasis on sustainability and mental health in education. For RQ3, most student teachers favored collaborative modes of working, either in *small groups* or *pairs*, over individual tasks. Interestingly, both groups showed a relatively balanced interest in working with a partner, though the number of Turkish participants choosing this option was slightly higher. Concerning RQ4, student teachers expressed clear expectations from teacher educators they valued guidance in *using digital tools, scaffolding for project management, and opportunities to reflect on learning methodologies*. Interestingly, certain practices such as making learning relevant to students' lives or encouraging collaborative work were not among the most selected preferences, particularly by Turkish respondents. Besides, when teacher educators introduced challenging learning experiences, it was observed that, except for a few student teachers from Italy, the approach was not widely favored. With regard to RQ5, participants preferred tasks that allowed them to be in active to collaborate and communicate including English learning as a second language which was the most frequently cited theme among the Italian participants and also prominently mentioned by Turkish student teachers. For both cohorts, English proficiency is not only seen as a tool for communication during the project but also as a critical skill for their future careers as educators in a globalized world. In response to RQ6, both groups emphasize the value of teamwork, cooperation, and effective communication with peers, and view the project as a platform for enhancing their preparedness for future teaching roles. A notable difference among the groups arises in the emphasis on *communication* and *language skills*, which appeared far more frequently among Italian participants than Turkish ones. Italian students highlighted *improving their English language proficiency*, *acquiring new language strategies*, and *engaging in communicative learning.* In contrast, language development did not emerge as a dominant theme among Turkish student teachers, suggesting either differing language learning needs or a stronger existing proficiency level among the Turkish cohort. Finally, for RQ7, the primary motivations for participation were *professional development, intercultural exchange*, and *the chance to apply digital technologies in innovative ways*. A comparative analysis between Turkish and Italian student teachers revealed culturally influenced differences in collaboration preferences and learning orientations. Turkish participants tended to prefer working individually, which may reflect the influence of a more structured and exam-oriented educational tradition, as well as the stronger historical and political framing of educational discourse in Türkiye. In contrast, Italian participants emphasized the importance of group work and interpersonal exchange, consistent with a more dialogic and participatory learning culture. Interestingly, both groups appeared to avoid challenging or high-risk tasks, suggesting a shared inclination toward comfort and familiarity in learning processes. This pattern may indicate a cautious approach to project-based learning, where the emphasis is placed on successful task completion rather than experimentation. Interpreted within a sociocultural perspective, these findings underscore how national contexts and educational cultures shape student teachers' engagement with collaborative digital environments like eTwinning.

In conclusion the findings of this study underscore the significant potential of integrating eTwinning into Initial Teacher Education (ITE) programs to foster student teachers' professional growth, intercultural competence, and digital pedagogical

awareness. The motivational profiles of the participants revealed distinct cultural orientations. Italian student teachers demonstrated a pronounced interest in linguistic development, intercultural communication, and creative pedagogy. A desire for personal growth, enjoyment, and reflective practice within diverse and stimulating learning environments characterized their engagement. In contrast, Turkish student teachers exhibited a more cognitively and professionally driven motivation, emphasizing practical teaching skills, self-regulatory competencies, and subject-specific development. Their preferences also reflected an inclination towards civic engagement, technological fluency, and structured project execution. These distinctions suggested that cultural and societal values significantly shape teacher identity formation and expectations from international projects. While both groups valued collaboration and professional development, the Italian cohort gravitated towards broader intercultural and artistic engagements, whereas the Turkish cohort prioritized the social impact of education and the development of pedagogical resources.

Furthermore, the study revealed that student teachers benefit from flexible project designs that accommodated diverse working preferences, such as group, partner, or individual formats. This flexibility enhanced not only collaboration and accountability, but also fostered autonomy and self-directed learning competencies essential for 21st-century educators. By engaging in collaborative, cross-cultural, and reflective activities, participants not only enhanced their understanding of innovative teaching practices but also developed a stronger sense of belonging to a global community of educators. However, the limited incorporation of such platforms into ITE curricula suggests the need for more structured and research-informed approaches to support sustainable implementation. The study thus calls for further policy support, curricular integration, and longitudinal research to maximize the transformative impact of eTwinning within teacher education. Although this study provides valuable descriptive insights into the expectations and experiences of Turkish and Italian student teachers, it does not include inferential statistical analyses to compare the two groups. Future studies with larger and more balanced samples could employ inferential statistical tests to examine group differences more systematically. Such analyses would allow researchers to determine whether the observed trends are statistically significant and to explore how cultural and institutional factors may interact with these preferences. Incorporating these methods in future research would enhance the generalizability and analytical depth of findings in comparative teacher education studies.

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Appendix-1: Questionnaire

Student name: Student age:

1.Think about why you would like to participate in this eTwinning project, what you want to learn during the project span, and how you like to learn. Write your answers below (min 250 – max 500 words)

2.Complete the sentences below
Project tasks will help me…
Overall I joined in this project because…

3.Select three skills from below list you want to improve mostly during the project time
- Self-regulation
- Flexibility
- Wellbeing
- Empathy
- Communication
- Collaboration
- Growth Mindset
- Critical Thinking

4.Select up to three options from the below list you like to discuss or learn about. If you want, you can write in another idea in the ”other” blank.

Environmental issues Music Technology
Politics Events in the news Issues in my community
History Sports Issues affecting young people
Culture Art Other: _____

5.Select your study preference from the list below. (You can select more than one)
- alone
- with a partner
- with a team or group

6.What you mostly like to learn by. Select from the list. (You can select more than one activity)
- talking with others
- writing
- drawing or building things
- doing activities that involve moving creating work with computers
- listening to music or people
- watching videos
- playing games

7.“I learn best when my teachers….” Select up to four options from the below list to complete the sentence.
- make learning fun (games, puzzles, humor)
- make learning challenging
- help me discover things on my own
- are excited about teaching
- are friendly and encouraging
- share their experiences in their learning tell me how to improve my work
- are fair with class rules and grades
- tell me when I am doing good work
- explain instructions clearly
- explain why we are doing something
- let me make choices during activities and projects let me be creative
- ask me to use problem solving skills
- encourage class members to work together
- make learning relate to my life and interests
- use different types of materials (videos, music, Internet resources, books)
- Other ideas: