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Empowering future teachers for a sustainable intercultural and inclusive education

The impact of eTwinning on Initial Teacher Education

Edited by Alexandra Tosi



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Foreword

by Ulrike Storost*

More than one decade ago, our partners, the National Support Organisations (NSO), began to promote eTwinning in Initial Teacher Education (ITE) in a couple of European countries. This marked the start of the Teacher Training Initiative, as it was called at that time. Over time, more and more NSO became interested in promoting eTwinning in ITE institutions. The situation changed considerably in 2019 when working with ITE institutions became an integral part of the NSO work programmes. Likewise, we rebranded the initiative as eTwinning for Future Teachers to ensure that the emphasis on initial teacher education is better reflected in the name.

With the relaunch, student teachers have also been able to register in eTwinning and carry out multidisciplinary, international learning projects that are then implemented together with pupils under the guidance of teacher educators. Through eTwinning, student teachers can learn essential future skills, project planning and guidance, international interaction, teamwork, and an inclusive teaching approach. With these skills, they will be better equipped to work in international teaching, education, and research networks. Several hundred ITE institutions and teacher educators as well as thousands of student teachers have already been taking part.

eTwinning for Future Teachers is important to the European Commission in several ways. First, at individual level, introducing young professionals to eTwinning as part of their education gives them a head start to develop into their profession. From the start, it opens horizons towards the innovative and intercultural teaching methods that eTwinning embodies. It makes it easier for them to start eTwinning projects with their classes, once they have entered the teaching profession. And second, at systemic level, the European Commission and European Union Member States are working to achieve their collective vision for a European Education Area. It aims at building more resilient and inclusive national education and training systems. Offering cross-border collaboration and learning opportunities for Initial Teacher Education is key to achieve this vision by 2025, and eTwinning for Future Teachers is easily accessible to start this process.

^{*} Ulrike Storost, Head of Sector – online education platforms European Commission Directorate-General for Education and Culture EAC.B.2 Schools and Multilingualism (ulrike.storost@ec.europa.eu).

The European Commission has given cross-border collaboration among ITE institutions another push by setting up the Erasmus+ Teacher Academies initiative under the European Education Area. Erasmus+ Teacher Academies are large-scale networks bringing together providers of initial teacher education and of continuous professional development, ministries, national authorities, teacher associations, and schools helping teachers to practice their new skills. These networks aim at supporting educators by enhancing cooperation in teacher training at all stages of their careers, from initial teacher education to novice and in-service training as well as continued professional development. With projects running for three years, the Academies are developing innovative methods, joint courses, virtual training, and learning mobility opportunities.

In addition, teachers can advance their professional development with online courses, webinars and teaching materials offered on the European School Education Platform, the new home for eTwinning. This platform covers a variety of topics linked to EU priorities in education, such as learning for environmental sustainability, blended learning, multilingualism, and inclusion.

All these initiatives are part of the European Commission's efforts to support and value the teaching profession. Attracting and retaining teachers is a big challenge in front of us, especially as so many countries are facing teacher shortages.

I would like to thank the Italian NSO and the authors for compiling this publication. The contributions to this book give evidence that eTwinning for Future Teachers is a meaningful and important tool in initial teacher education. I sincerely hope that this publication will inspire more ITE institutions to participate and make eTwinning for Future Teachers a full success story across all participating countries.

Presentation

by Cristina Grieco*

As the President of INDIRE, I am proud to present this volume, which thoroughly illustrates the experience and results of the eTwinning Initial Teacher Education (ITE) initiative in Italy and documents important examples from other European countries.

eTwinning ITE is a European initiative that involves universities in the initial training of future teachers conveying eTwinning's values, experiences and European dimension to the service of initial teacher education. The primary goal is to equip future teachers with the necessary skills and knowledge required to adeptly employ digital technologies, promote educational innovation and European dimension, embrace multilingualism and nurture global citizenship.

In Italy, eTwinning ITE was launched in 2012 and has seen the participation of an increasing number of universities over the years. Currently, 26 Italian universities, spread across nearly all regions of Italy, actively engage in this initiative, impacting thousands of aspiring teachers each year, particularly those from pre-primary and primary school sectors.

eTwinning ITE is based on two main activities. Firstly, it involves integrating eTwinning modules into the pedagogical curriculum of future teachers, encompassing diverse subjects like technology labs, languages, didactics, and incorporating recognized direct or indirect internship experiences. Secondly, and perhaps more importantly, it encourages the active participation of students in eTwinning projects. The true impact of eTwinning ITE emerges when future teachers directly engage with students and schools within eTwinning projects, whether national or international, during their traineeships, with the guidance of tutors and in collaboration with other European teachers. This volume therefore represents an important milestone for INDIRE's Italian eTwinning Unit and celebrates results that couldn't be more timely, considering the transformative phase Italian schools are currently undergoing.

The regulations laid out in the Decree of the President of the Council of Ministers 4 August 2023, which reformed the initial training of secondary school teachers, find a perfect match in eTwinning ITE. As supported by research, this initiative equips

^{*} Cristina Grieco, INDIRE President (segreteriapresidente@indire.it).

trainee teachers with the means to develop digital teaching, collaboration, and innovation skills, all while fostering a European and global citizenship perspective.

I am therefore convinced that eTwinning ITE can play a pivotal role in shaping the training of future teachers, and I hope that the growth achieved by this initiative in our country in recent years will continue to expand also beyond the pre-school and primary school settings where it has thrived so far, encompassing the initial training of future teachers of all levels. The eTwinning ITE initiative is a valuable opportunity for all future teachers to acquire the necessary skills and knowledge to be effective in a world that needs educators capable of facing the complexity and challenges of the future.

Introduction

by Alexandra Tosi*

To form competent teachers in the use of technology, capable of innovating their teaching methods, promoting the European dimension, multilingualism, and global citizenship in their students, is a goal for all European teacher initial education systems. eTwinning was founded in 2005 on the initiative of the European Commission precisely to support these objectives and has involved to date over one million teachers in Europe and over 100,000 in Italy. While the in-service training of teachers has been the main activity of eTwinning for a long time, it is only since 2012 that the European Action has started to pay close attention to the initial education of future teachers.

The eTwinning Initial Teacher Education (ITE) initiative has grown significantly at European level over the last ten years: after the pilot phase that involved only a minority of countries, including Italy, the initiative spread in several new countries and proved relatively stable and fruitful in the old ones. Thanks to the work of the National Support Organisations (NSO) and the Central Support Service (CSS) taskforce and to the contribution of many experienced ITE institutions, many of which Italian, an ITE model was elaborated, trying to draw some guidelines and recurring traits from the many different and variegated local experiences. Having grasped the relevance of the initiative, the European Commission decided to strongly invest into eTwinning for Future Teachers: in 2018 the initiative became compulsory for all countries and in 2019 students were allowed to register in the platform. These two turning points ratified its definitive and full integration into the eTwinning Action and gave a new boost to the initiative also in Italy, as the NSO asked all Regional School Offices to pro-actively contact the remaining universities that hosted a Degree Course in Primary Education Science, which brought to 14 new universities joining the initiative between 2019 and 2023 and two more joining while this publication is being published.

Thanks to the long experience and enthusiastic participation of many ITE institutions, Italy ranks today among the most active countries in the eTwinning initiative aimed at future teachers. The number of universities and the quality of their involvement has grown constantly over the years, showing how deeply rooted the initiative has become and making it particularly interesting and relevant to investigate its dy-

^{*} Alexandra Tosi, member of the Italian eTwinning National Support Organisation (a.tosi@indire.it).

namics and results with an impact study and a comparative analysis. It is within this context that in 2021 the Italian NSO has started a new collaboration with INDIRE research and the University of Florence, that led to this publication.

In the last few years, the Italian NSO has worked hard to obtain an official recognition of eTwinning's value by the Ministry of Education, both in terms of professional development and as a vehicle for innovation for the whole school. In 2021 eTwinning Italy has reached a very important momentum, becoming the object of a Ministerial Note sent to all schools, encouraging all teachers in Italy to actively take part to the community and launching the eTwinning course that for the first time was officially recognised by the Moe's platform, SOFIA (Ministerial Note 2 December 2021, No. 37817), and also being referred to as a important tool for teachers' professional development in the Ministerial Note setting out the guidelines for newly hired teachers' training during their probational year (Ministerial Note 4 October 2021, No. 30345, and Ministerial Note 15 November 2022, No. 39972). In the same year, an important publication was released, result of a collaboration between the Italian NSO, INDIRE's researchers and the University of Florence, confirming the positive impact of eTwinning's experience on teachers' professional development¹.

At this juncture, it was crucial for us to pause and reflect on the outcomes achieved so far, in order to discern the most sustainable and effective ways of implementing the initiative in the long run and better support both the universities already involved and newcomers. This becomes especially pertinent and urgent in light of the ongoing national reform for initial teacher education at the secondary school level introduced with Law 29 June 2022, No. 79.

The publication is divided into two parts: the most substantial *Part One* is related to eTwinning ITE in Italy while *Part Two* refers to the European level. *Part One* is articulated in three chapters: CHAP. I provides an overview on eTwinning ITE's origins and development in Italy, and some general characteristics and trends observed in the initiative with respect of data related to a.y. 2021-22; CHAP. 2 gathers the contributions from all Italian involved universities' representatives, briefly describing how eTwinning was integrated in their curriculum and the motivations for and results of their participation; CHAP. 3 presents the results of the research activity on the practices and organizational models adopted in the participating Italian universities and the benefits of its adoption, result of a scientific partnership of the Italian NSO with the Department of Education, Languages, Interculture, Literatures and Psychology of the University of Florence. The *Part Two* starts with a general overview on eTwinning ITE in Europe in CHAP. 4, and then gathers four testimonials from eTwinning countries: Ireland (CHAP. 5), France (CHAP. 6), Poland (CHAP. 7), Spain (CHAP. 8) and Türkiye (CHAP. 9).

^{1.} D. Nucci et al., Sviluppo professionale e processi di innovazione: una ricerca sulla comunità eTwinning, in M. C. Pettenati (a cura di), Paese formazione. Sguardo d'insieme e viste particolari da esperienze nazionali di formazione degli insegnanti, Carocci, Roma 2021, pp. 240-61.

This volume thus gathers the fruits of several years of work and reflects the development of an educational approach that benefits from a European framework and is enhanced by, as well as enhances, the universities that choose to adopt it.

I am very grateful to many individuals, each of whom has played an important role in turning this project into a reality. First of all, Donatella Nucci, Head of the eTwinning Unit, who entrusted me with the eTwinning for Future Teachers initiative right from the very beginning, believing in my ability to nurture this endeavour, and Maria Chiara Pettenati, who, having enthusiastically embraced eTwinning and grasped its full potential, has encouraged me to delve deeper into the subject, helping me to bring out and enhance my knowledge. I also extend my heartfelt thanks to my colleagues within the Italian eTwinning team, who extended their daily efforts to embrace this significant aspect of teacher training and the colleagues from European NSO and CSS, who experimented in their countries and shared their experiences in this volume.

While I owe my thanks to many others, there is a specific group to whom I dedicate this volume, firmly believing that the eTwinning ITE experience can truly make a difference: future teachers.



Part One eTwinning for Future Teachers in Italy



eTwinning and Initial Teacher Education (ITE) in Italy: from experimentation to systemic initiative

by Alexandra Tosi, Sara Martinelli and Maria Chiara Pettenati*

1.1 Introduction

In this chapter, we provide a multi-longitudinal photography – across the years and across the Italian territory – of when and how the eTwinning ITE experience has been consolidating in the various universities that have adopted it over time. The chapter is complementary to CHAP. 2, which offers a vertical analysis, university by university. The longitudinal reading provided here, based on data referring to the academic year 2021-22, doesn't aim so much to compare universities in order to classify their performances, but rather to highlight prevailing and fruitful approaches that may support the effectiveness of the initiative.

While a positive correlation often exists between years of experience in eTwinning ITE and the depth of curricular integration, this cannot be considered an absolute rule. Numerous other concurrent factors come in fact into play, exerting influence on the development and establishment of the initiative: the modalities of its introduction, the key actors that first promote it and then work on it, internal dynamics and political support by the university's management, commitment in time by key actors and the creation of a motivated eTwinning team, the quality of trainings and relations held by eTwinning ambassadors, Regional School Offices and NSO representatives.

It is our intent to try to understand the correlation among those factors and how they have influenced the initiative's development within the involved universities, and identify the characteristics that can, possibly, indicate a mature level of the model, as reflected by the number of students involved, the hours and type of trainings, the type of curricular integration and the formal recognition of eTwinning activities for students. By showcasing and analysing the different paths that are leading to eTwinning's integration in primary teachers initial education in Italy, we hope to help as well other universities find their own course, that best suits their situation and can thus be effective in the

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long run. This reflection will also prove valuable in guiding future actions of the NSO, in order to facilitate the rooting of the initiative in the most favourable environment.

1.2 The eTwinning ITE initiative

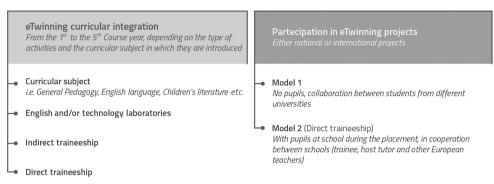
The eTwinning initiative aimed at future teachers dates back to 2012, when a group of National Support Organizations (NSO) decided, in collaboration with the Central Support Service (CSS), to start a pilot phase involving in eTwinning also institutes devoted to Initial Teachers Education. After some years of successful experimentation, the initiative became officially part of eTwinning NSO's workplan on a voluntary basis and changed name to eTwinning Teacher Training Initiative (TTI). Eventually, in 2018, it became compulsory for all countries and stabilised its name becoming eTwinning Initial Teachers Education (ITE), also known as eTwinning for Future Teachers.

Even though its organization, modalities and objectives may vary a lot from country to country and also from one institution to another, the involvement of universities participating in the eTwinning ITE initiative mainly consists of two activities (FIG. I.I):

- i. incorporating one or more eTwinning modules into the training curriculum of future teachers. This can be done in ways that are most suitable for each participating institution; for instance in Italy, eTwinning could be introduced within a specific subject or in technology and/or English language laboratories or become part of indirect internships. Trainings are generally provided by experienced ambassadors but in some cases can be delivered also by university teacher educators that have been previously trained on eTwinning. In some fortunate cases, these two figures coincide, and eTwinning ambassadors become officially university tutors, thus allowing for a more comprehensive integration. These training activities, aimed both at students and teacher educators, are fully integrated in the Regional eTwinning Work Plans agreed with the Italian NSO and Regional School Offices';
- 2. participation of students in eTwinning ITE projects. Even though most universities get involved in ITE projects sooner or later, this activity, being more complex, remains optional and can be carried out at a later stage. In order to simplify and better explain what can be done within the ITE initiative, it can be useful to simplify the project activities' representation, reducing the project types to two main categories:
- a) students-to-students eTwinning ITE projects (stud-to-stud projects) can be founded among different universities, either national or international, whose students collaborate remotely based on shared interests and objectives. In this case, usually two teacher

^{1.} In Italy most eTwinning training activities are carried out at regional level with the help of Regional School Offices, coordinating involved schools and ambassadors. A Regional eTwinning Plan is agreed among all parties and approved by the NSO and training activities carried out accordingly. Ambassadors are paid for the training with eTwinning funds.

FIGURE 1.1
ITE activities observed in involved institutions



Examples of formal recognition: reference in official university documents and in the description of the course, creation of an eTwinning ECTS, contribution to the exam grade, recognition of a certain number of hours from the internships or laboratories, an extra point in the final grade for the thesis.

educators from different universities agree on a shared work program and organize some distance collaborative activities that put students in contact and allow them to discuss, collaborate and exchange knowledge and experiences. An eTwinning project is registered in the platform and students and teacher educators engage in distance collaboration in the TwinSpace, as teachers and pupils would do in a "regular project". This type of project can be sometimes difficult to set up and manage, since universities, especially from other countries, may have divergent timetables and calendars, most probably a different internship organization and teacher educators have first to find compatible priorities and shared objectives. Moreover, it may sometimes be difficult to fit the many facets and multiple activities of an eTwinning ITE project into a specific timetable and format. Therefore, both students and teacher educators may end up spending more hours on these activities than initially planned. On the other hand, these projects are also very motivating and fruitful, for students, teacher educators and for the university as a whole, as they foster international collaboration, peer learning, transversal key competence development and allow to interact with students from other countries through a virtual mobility. In some cases, these projects have been also integrated with actual students' Erasmus mobilities, thus making the experience even more complete;

b) eTwinning projects with pupils, initiated by students during their placement at school, in collaboration with their school-tutor, in Italy typically during their 4th or 5th year, when they are asked to carry out more autonomous tasks and design their own projects/activities. In this case, projects are in every respect "regular eTwinning projects". Students and their school tutors will have to find a partner (that can be either a regular teacher or another student teacher), plan together some project activities and carry them out collaboratively during their stay at school. This type of project

is, in the end, the ultimate eTwinning experience that allows the future teacher to fully understand how eTwinning works and how it can impact pupils' learning and teachers' teaching methodologies. But in order for it to happen, well-trained and motivated students have to find, and choose for their placement, a host school and a tutor that are already active in eTwinning or at least willing to introduce eTwinning and support them. This may be at times challenging, as eTwinning schools' and students' geographical distribution often don't match.

Over time, involved universities have developed also different types of projects, often a mixture of the two above, result of the contamination of the model with the diverse realities of their context. For instance, there were projects among universities that focused on students' sharing their internship experiences with pupils, or experimenting together methodologies and project activities in class, but shared through a student-to-student project. There were projects among universities and schools, where students would introduce innovative methodologies studied at university, collaborating with school teachers and their pupils. There were projects among students from the same university during their placement, or training projects (or eTwinning Groups) where students from the same university collaborated among themselves to simulate real life experiences. Erasmus mobilities for students and teacher educators were also sometimes combined with eTwinning's virtual mobility. And many more examples may emerge over time, as involved actors always find creative ways to best adapt eTwinning to their context and needs and thus creating new models to be shared and disseminated.

eTwinning ITE in Italy: context and evolution

The Italian eTwinning NSO has been among the first countries to take part to the initial pilot phase of the European eTwinning initiative addressed to future teachers. In the a.y. 2012-13 Italy took part with some rather spontaneous initiatives, led by eTwinning ambassadors that had been seconded to universities to train future teachers, both at primary and secondary level. At that time, training for future secondary school teachers was organized through the Active Training Internship (Tirocinio formativo attivo, TFA), consisting in one year of courses and internship for graduated students from different subjects, who aimed at becoming teachers. Those courses would take place at universities, with some hours of internship in hosting schools. As in Italy at the time there were many ambassadors involved in these trainings, the Italian NSO started mainly by introducing eTwinning to future secondary school teachers, while only few courses of Primary Education Science were involved in the first pilot phase (Catholic University of Milan, University of Palermo, University of Florence, University of Genoa). In the following years, nevertheless, national rules about initial education for future secondary school teachers changed and TFA remained active only for special needs teachers and in-service temporary teachers that had already worked at least 3 years in schools (*Percorsi abilitanti speciali*, PAS)². For some years eTwinning was still introduced occasionally in some of these courses but, waiting for the new reform to come into force, the focus was shifted to future primary teachers, as their initial education had a much clearer path and certain professional outcome. For this reason, in Italy the ITE initiative has concerned mainly universities with Degree Courses in Primary Education Science, with few exceptions as University of Foggia, University of Verona, and Roma Tre University, that also involved their Language Departments students that aspire to become Language secondary school teachers and/or that hosted training for future special needs teachers (TFA).

Italy is particularly active within the ITE initiative and counts today 26 participating universities with more willing to do so in the near future³. In 2021, on a total of 7,500 students registered in eTwinning, over 4,000 were Italians. In the a.y. 2021-22 circa 5,000 students were trained on eTwinning in Italian universities. The Italian participation to the initiative is not only relevant from a quantitative point of view, but also qualitatively, as proven by the eleven ITE Awards received in 2021-22⁴ and the recognition of Institution of Initial Teacher Education of the Year at European level awarded to the University of Florence (BOX 1.1).

BOX I.I

Initial Teacher Education in Italy

In Italy future teachers for *primary* and *pre-primary* school level have to attend a 5 years university course (Master's Degree) generally called *Corso di Scienze della formazione primaria* (Primary Education Science). Starting from Year 2, students are asked to do a certain amount of internship hours each year. Those hours are divided between:

- Direct internship (*Tirocinio diretto*), where students go in a hosting school and do class activities with their school tutor, the more and more engaging and autonomous as years passes (from mere observation during the first year to project design and implementation in the last year). Practice takes place both in primary and pre-primary schools;
- Indirect internship (*Tirocinio indiretto*), where students engage in practical laboratory activities within the university under the guidance of *university tutors*, school teachers seconded to the university with either part-time or full-time leave for this purpose. These activities are meant to introduce, accompany and follow up the work students are doing in class during their placement.

As concerned the secondary school level, in Italy, as indicated in the newly approved

- 2. First TFA course was in 2012-13 and then again in 2014-15. After that, TFA was reserved only to future special needs teachers.
- 3. Hopefully the signing of the Memorandum of Understandings with all universities involved in eTwinning ITE, foreseen by the end of 2023, will help further spread awareness among universities' managements, reinvigorate the eTwinning teams and facilitate a more official integration into the curriculum in all universities.
- 4. Full list on the Italian eTwinning website: https://etwinning.INDIRE.it/premi-e-riconoscimenti/ite-award/.

Decree of the President of the Council of Ministers 4 August 2023, future teachers need to have an entitled Master's Degree suitable for the teaching of each subject plus 60 credits on pedagogical issues, obtained at university level.

Aspiring teachers from all school levels must first succeed in a public competition, and subsequently complete a probationary year at a school, which includes online training and a final verification. During this year, they function as full-time teachers (*Neoassunti*).

Legislative framework:

- Ministerial Decree 10 September 2010, No. 249, Regolamento concernente: «Definizione della disciplina dei requisiti e delle modalità della formazione iniziale degli insegnanti della scuola dell'infanzia, della scuola primaria e della scuola secondaria di primo e secondo grado, ai sensi dell'articolo 2, comma 416, della legge 24 dicembre 2007, n. 244»;
- Law 29 June 2022, No. 36, Conversione in legge, con modificazioni, del decreto-legge 30 aprile 2022, n. 36, recante ulteriori misure urgenti per l'attuazione del Piano nazionale di ripresa e resilienza (PNRR);
- Ministerial Decree 16 August 2022, No. 226, «Disposizioni concernenti il percorso di formazione e di prova del personale docente ed educativo, ai sensi dell'articolo 1, comma 118, della legge 13 luglio 2015, n. 107 e dell'articolo 13, comma 1 del decreto legislativo 13 aprile 2017, n. 59, nonché la disciplina delle modalità di svolgimento del test finale e definizione dei criteri per la valutazione del personale in periodo di prova, ai sensi dell'articolo 44, comma 1, lett. g), del decreto legge 30 aprile 2022, n. 36, convertito con modificazioni dalla L. 29 giugno 2022, n. 79»;
- Decree of the President of the Council of Ministers 4 August 2023, Definizione del percorso universitario e accademico di formazione iniziale dei docenti delle scuole secondarie di primo e secondo grado, ai fini del rispetto degli obiettivi del Piano nazionale di ripresa e resilienza.

The temporal and spatial distribution of the universities involved in the initiative

To date, 26 universities in Italy, spanning across almost the entire country, have joined the ITE initiative, involving mainly Primary Education Science courses, but also other Departments (FIG. 1.2)⁵. Some regions also see the presence of more than one university, and in some cases even 100% coverage of universities with Primary Education Science courses is achieved. In the region Marche some preliminary meetings have already taken place in order to involve University of Macerata and Urbino, while there are still two regions, Valle d'Aosta and Friuli Venezia Giulia, where progress has not yet been possible. Overall, eTwinning is as of today integrated in 68% of Italian Primary Education Science courses (FIG. 1.3)⁶.

- 5. At the time of publishing, Milano-Bicocca University is in the process of becoming an ITE member.
- 6. In a.y. 2022-23, on a total number of 37 courses of Primary Educational Sciences in Italy, 25 are already involved in eTwinning, or about to do so.

FIGURE 1.2

List of universities involved in ITE

ARDI 1770

University of L'Aquila - Primary Education

BASILICATA

University of Basilicata - Primary Education

CALARDIA

University of Calabria - Primary Education

Mediterranean University of Reggio Calabria Primary Education

CAMPANIA

University of Salerno - Primary Education

Suor Orsola Benincasa University - Primary Education

EMILIA ROMAGNA

University of Bologna - Primary Education

Ι ΔΖΙΟ

Roma Tre University - Primary Education Department of Foreign Languages

The European University of Rome - Primary Education

Sapienza University of Rome - Primary Education

LIGURIA.

Università of Genova - Primary Education

LOMBARDIA

University of Bergamo - Primary Education

Catholic University of the Sacred Heart of Milan Primary Education

University of Milano-Bicocca - Primary Education*

MOLISE

University of Molise - Primary Education

PIEDMONT

University of Turin - Primary Education

DIGUA

University of Foggia - Department of Humanistic Studies

University of Salento - Primary Education

SARDINIA

University of Cagliari - Primary Education

SICILY

University of Palermo - Primary Education

Kore University of Enna - Primary Education

TUSCANY_

University of Florence - Primary Education

TRENTINO ALTO ADIGE

Free University of Bozen-Bolzano - Primary Education

IIMBRIA

University of Perugia - Primary Education

VENETO

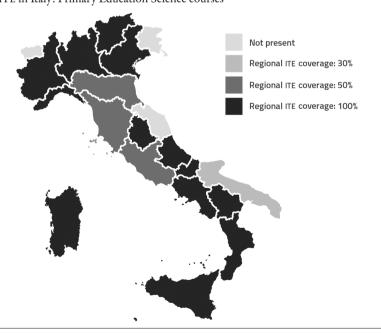
University of Padua - Primary Education

University of Verona - Primary Education

Department of Foreign Languages

FIGURE 1.3

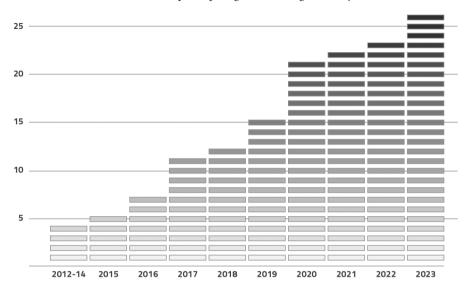
eTwinning ITE in Italy: Primary Education Science courses



^{*} university in the process of becoming a member

FIGURE 1.4

Growth in the number of universities participating in eTwinning over the years



Year of participation in the initiative ITE

2012-14

- University of Genoa
- Catholic University of the Sacred Heart
- University of Palermo
- · University of Florence

2015

• University of Cagliari

2016

- University of Foggia
- University of Turin

2017

- University of Bologna
- University of Padua
- University of Salerno
- University of Verona

2018

• University of Perugia

2019

- University of L'Aquila
- Roma Tre University
- Mediterranean University of Reggio Calabria

2020

- Free University of Bozen-Bolzano
- Kore University of Enna
- University of Molise
- University of Calabria
- University of Basilicata
- The European University of Rome

2021

• University of Bergamo

2022

· University of Salento

2023

- Suor Orsola Benincasa University
- Sapienza University of Rome
- University of Milano-Bicocca*

^{*}university in the process of becoming a member

The joining of universities in time has had some turning points following European trends, the internal workflow of the Italian NSO and regional lobbying activities, but in general we can observe a constant increase over the years, that made it also easier for the NSO to manage its growth, as a bigger number of universities meant a larger coordination and documentation effort and, after 2019, an increased commitment also in terms of helpdesks for students and teacher educators and their validation. As previously observed, a big boost can be seen after ITE became fully integrated in eTwinning's workplan and compulsory for all countries, as the Italian NSO and Regional School Offices proactively contacted new universities (FIG. 1.4).

Universities' motivation for joining

Universities' motivation for joining the initiative certainly varies from case to case, according to the peculiarities of each situation and the modalities and the promotors of its introduction, but some recurrent objectives can be found in some official documents and universities' representatives' presentations and contributions:

- Development of future teachers' crucial competences and professional experience and innovation in their training methods;
- Internationalization: eTwinning represents an opportunity to innovate the university's academic offerings, enriching it with virtual mobility and international collaboration among both teacher educators and students, through the participation in collaborative projects and European events;
- Third Mission: eTwinning promotes public engagement through seminars, conferences, and other educational and cultural dissemination initiatives, involving other public and private institutions. This allows for the dissemination of trainings' results and the sharing of best practices;
- Research: ITE representatives and students can take part in monitoring or research
 initiatives agreed upon at the European level, collaborating with other national or European universities and with host schools and can reach a wider audience thanks to
 the international echo provided by the eTwinning Community;
- Visibility and Recognition: each year, the European Commission designates the
 most exemplary institutions of the initiative, awarding the "ITE Award", an official
 recognition for the achievements reached in the initial training of future eTwinning
 teachers;
- Training: the involved teacher educators and students can register on the platform and benefit from all opportunities for formal and informal professional development within the community.

1.6 Different paths to eTwinning's integration in ITE

At the very beginning of the initiative, eTwinning was introduced almost spontaneously in teachers' initial education by those eTwinning ambassadors that acted also as teacher educators at a university as a result of a bottom-up approach. With time, in the most successful cases, this was paired by a top-down approach, as the universities' management would grasp the importance and potentialities of eTwinning and help systemise those sporadic initiatives. The extent of this political support would ultimately determine the success of the initiative, and instances where it was lacking resulted in setbacks for the initiative. So, for instance, in the University of Bologna all the work and responsibilities were given solely to one of the university tutors that happen to be also an eTwinning ambassador. The initiative was welcomed as a nice plus, but not proactively supported. As the ambassador finished her assignment at the university, the action stalled for some years. A similar experience occurred in the Universities of Cagliari, Genova, Torino and Palermo, where the initial rather weak level of curricular integration was depending too much on the presence, work and willingness of single individuals rather than on well-established procedures and an official recognition and systemic integration. Only after some lobbying in collaboration with Regional School Offices and the NSO, and thanks to a more active involvement of the university management, it was finally possible, at least in some cases, to give a new boost to the initiative and improve a deeper curricular integration, and thus its sustainability in the long term.

More recently, especially after the ITE has become compulsory in eTwinning after 2018 and Regional School Offices have been invited to contact directly new universities, the introduction of eTwinning has followed a more top-down approach, having first involved the university management and only later other teacher educators. Even though tutors and teacher educators in general cannot be forced to embrace eTwinning, as they have a great autonomy in the management of their lessons and students' internship, the presence of a shared vision and political support from the university management, as well as the formal recognition of its value and official integration in the course program, proved to be crucial for their motivation and active engagement. The bottom-up approach has therefor been vital at the beginning of the initiative, as it helped to spread the initiative and make it known in many universities when eTwinning was mostly unknown in the academic environment. But experience has proven that a combination of both is needed to succeed.

Another key variable is represented by the number and role of the people in charge of eTwinning within the university, which of course is very much linked to the above mentioned dynamics. It is important to have motivated key actors, possibly a team of people with a mix of roles, both at operative and political level. In fact, if eTwinning garners support solely from high-level professors and university management, without the active involvement of hands-on teacher educators work-

ing directly with students, particularly on time and commitment-intensive project activities, the risk is that eTwinning remains a dead letter, either available only for few very motivated students that opt for it voluntarily, or introduced to all students but only with a very short and general presentation. On the other hand, should only those on the practical front be engaged, as observed earlier, the risk is that once the motivated individual steering the entire effort departs, the eTwinning experience may die out.

Typically, a strong eTwinning team would involve university tutors, in charge of students' direct and indirect internship, teacher educators, in charge of English and/ or Technologies laboratories, as well as at least one full professor and, possibly, the course coordinator and management. The involvement of also other actors such as PhD students, researchers, and university lecturers, can also help build a fertile environment and a motivated team that may be much more active and more likely take part to project activities, sharing responsibilities and helping each other.

1.7

Quantitative and qualitative analysis of eTwinning's curricular integration in Primary Education Science courses

The great variety of curricular integration paths followed by universities, that is possible thanks to ITE's flexible approach and eTwinning's adaptability and variety, often reflects upon the different preferences, needs and possibilities of eTwinning's first promoters within a given university and context. Curricular integration is also a particularly time-sensitive variable, as eTwinning may initially be introduced in a certain way, and then change over time. What appears to be the best, or at least a possible solution at the very beginning, may change later on, as new actors come and go, the political support within the university changes and/or the model adopted proves to be less successful than foreseen. Many times, especially when eTwinning was introduced bottom-up, teacher educators fully understand eTwinning's potentialities and affordances only after getting to know it better or thanks to a peer exchange with other more experienced universities, and therefore may find a better slot in which to fit it at a later stage. It is important to emphasise that the following infographics refer only to data collected from Primary Education Sciences courses and, while incorporating quantitative parameters, are mainly designed to provide a qualitative representation of the eTwinning ITE phenomenon in Italy, referring to a.y. 2021-22 (post-pandemic).

FIG. 1.5 clearly displays the subject/modules distribution, highlighting the crucial role played by indirect traineeship, chosen by over 76% of involved universities to train students on eTwinning, while respectively 48% and 29% of them integrated it in the English and in the ICT laboratory. Only 14% introduced it in a regular course led by a full professor, as usually the bulk of the work is led by other teacher educators in labs and internship.

FIGURE 1.5 eTwinning curricular integration in Primary Education in a.y. 2021-22

| | Indirect internship | English Lab | Educational technologies Lab | Lessons on pedagogical subject |
|---|---|-------------|--|--|
| University of L'Aquila | $\bigcirc -\bigcirc -\bigcirc -\bigcirc -\bigcirc -\bigcirc$ | 1 | | |
| University of Basilicata | 0-0-0-0-0 | 1 | 0-0-0-0 | \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc |
| University of Bergamo | 0-0-0-0-0 | 1 | | |
| Free University of Bozen-Bolzano | 0-0-0-0-0 | 1 1 | | |
| University of Cagliari | $\bigcirc -\bigcirc -\bigcirc -\bigcirc -\bigcirc -\bigcirc$ | 1 | | |
| University of Calabria | $\bigcirc - \textcircled{-} \bigcirc - \textcircled{-} \bigcirc - \bigcirc$ | | \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc | |
| Catholic University of the Sacred Heart o | f Milan | 0-0-0- | 1 | |
| The European University of Rome | $\bigcirc -\bigcirc -\bigcirc -\bigcirc -\bigcirc -\bigcirc$ | 1 1 | | |
| University of Florence | $\bigcirc - \textcircled{\tiny{-}} \textcircled{\tiny{-}} \textcircled{\tiny{-}} \textcircled{\tiny{-}} \textcircled{\tiny{-}} \textcircled{\tiny{-}} \textcircled{\tiny{-}}$ | 0-0-0-0 | | |
| Università of Genoa | | | 0-0-0- | |
| Kore University of Enna | $\bigcirc -\bigcirc -\bigcirc -\bigcirc -\bigcirc$ | 0-0-0-0 |] | |
| Mediterranean Univer sity of Reggio Calabria | | 1 1 1 | 1 1 1 | |
| University of Molise | | 0-0-0-0-0 | | |
| University of Padua | $\bigcirc -\bigcirc - \bigcirc - \bigcirc - \bigcirc -\bigcirc$ | 1 1 1 | 1 1 1 | 0-0-0-0 |
| University of Palermo | | 0-0-0-0 | •••-O-O-O | • |
| University of Perugia | $\bigcirc - \textcircled{\tiny{0}} - \textcircled{\tiny{0}} - \textcircled{\tiny{0}} - \textcircled{\tiny{0}}$ | \bigcirc | | |
| Roma Tre University | | 0-0-0-0 | | |
| University of Salerno | | 0-0-0-0 | 0-0-0-0 | |
| University of Turin | $\bigcirc -\bigcirc - \bigcirc - \bigcirc - \bigcirc - \bigcirc$ | 1 | | |
| University of Verona | | ••• | | |

| COURSE CO | CONDITION Active Inactive |
|--|---------------------------|
|--|---------------------------|

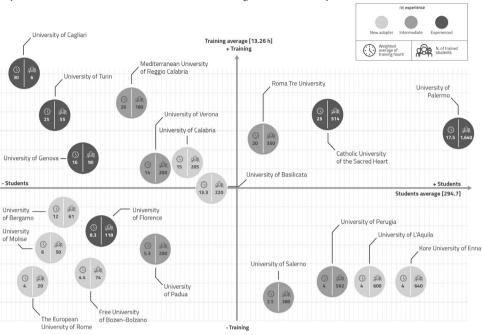


FIGURE 1.6
A.y. 2021-22: No. of trained students/No. of training hours in Primary Education

FIG. 1.6 provides a visual representation of the combination of students and hours, using the weighted average of training hours, that would ponder the number of hours with the number of trained students in each module/year in each university. The intersection of the X and Y axes is given by the average number of students trained (even though it must be taken into consideration that the range of variance is very high, going from 6 students in Cagliari to 1,640 in Palermo) and of the mean of the weighted averages of training hours (and as such, it serves here merely to give a general indication on a unique scale, to allow the comparison). The color of the circle reflects the temporal length of experience in ITE (New adopter, Intermediate, Experienced), a factor that may help interpret the 2021-22 picture in a more dynamic time dimension.

This infographic highlights the heterogeneity of the experiences and the difficulties of identifying recurring trends in eTwinning ITE, positioning the universities in four quadrants where the information becomes significant especially for universities positioned at the extremes of the quadrants. As evidence, the University of Florence, being awarded the European ITE award in 2022 and adopting a consolidated and mature ITE model, is positioned in the bottom left quadrants but very close to the general average.

Universities that involve a big number of students and train them intensively (upper-right quadrant) are most likely to be more experienced and bigger ITE institu-

tions; this is the case of University of Palermo, Roma Tre University and Catholic University of Milan. On the opposite side (bottom-left quadrant) may be found those universities that are still in an initial phase, engaging a small number of students for short trainings, such as European University of Rome, University of Bergamo, University of Bolzano, University of Molise (the latter with smaller numbers also because of the small size of the Molise region).

In order to better interpret the university responses and dynamize the freeze frame of data related to a.y. 2021-22, universities' representatives were asked to state whether the initiative was generally growing or diminishing. The overall picture, that can be seen in TAB. 1.1, is very positive, as the situation is positively evolving. It can in fact be observed that in most cases the initiative is still growing, or even strongly growing. In three cases the trend is stationary (which, considering that it is linked to universities with long standing experience, may simply mean the practice has been stabilized and is repeated in time) and in only two cases decreasing.

From the observation of the previous figures and TAB. 1.1, some trends and recurrent traits can be identified. Typically, eTwinning is included into the indirect internship and/or in the English language and educational technology laboratories, and less frequently in a full professor's course (often General Didactics and Pedagogy). The number of hours varies according to the level of in-depth study and activities can either be compulsory for all students or available only for a motivated selection on a voluntary basis, or a mixture of both cases, in different years and modules within the same university. Usually, big numbers of students correspond to few compulsory hours of general introduction to eTwinning, often during the first years of the course or in full professors' lessons. While longer trainings with laboratorial activities are often managed at a later stage (3rd to 5th year), with smaller groups of students, the number of hours depending on whether students are also asked to register in the platform, do some project planning simulation and, possibly, even take part to ITE projects. On average, these longer trainings would last between 8 hours up to 25 or more hours, depending on how much hands-on workshops, project activities and self-study time is included, often entailing the formal recognition of at least one ECTS (European Credit Transfer and Accumulation System). The two "types" of training (short-big numbers/long-small numbers) can coexist in the same university, having for instance a big number of students introduced to eTwinning for 2-4 hours in the first years, and then a smaller number of students engaged in long termed training. And there are of course exceptions, for instance the University of Palermo and the Catholic University of Milan, that engage big numbers of students in long-term trainings every year.

FIG. 1.7 represents the number of students involved in projects, both student-to-student ITE projects and regular eTwinning projects with pupils, carried out by students during their placement at school. It can be clearly observed that generally the number of students involved in project activities is much smaller than those trained and that among those, the number of students that carry out an eTwinning project during their placement in school (direct internship) is even lower. This can be

FIGURE 1.7 Students' involvement in eTwinning ITE projects in a.y. 2021-22

| | N. of students in N student-to-student projects | I. of students in school projects with pupils | Course year |
|---|---|--|---------------------------------------|
| University of L'Aquila – | 10 | 1 | |
| University of Basilicata – | 220 | 30 | |
| Free University of Bozen-Bolzano | 0 | 15 | |
| University of Calabria – | 0 | 1 | |
| Catholic University of the Sacred Heart of Milan | 79 | 20 | ○ ○ ○ ○ ○ |
| The European University of Rome | 0 | | |
| University of Florence – | 5 | 12 | |
| University of Genoa | 50 | 0 | |
| University of Molise | 50 | 0 | |
| University of Palermo | 3 | 0 | ○○ - |
| Roma Tre University | 350 | 0 | |
| University of Salerno | 60 | 0 | ————————————————————————————————————— |
| University of Turin – | 0 | 5 | |
| | COURSE 1st year 3rd year 5th | year CONDITION | Active Inactive |

explained with the level of complexity that comes along with ITE projects, that can be time consuming both for students and teacher educators. Project activities can be difficult to organize among different universities, especially with foreign countries that have different calendars and curricula and require an active role by the teacher educator in finding a good partner and planning together some collaborative activities for students. Moreover, students need to be highly motivated and have some formal recognition for their work. The limited, but still growing, number of students participating in regular eTwinning projects during their placement is due to the difficulties encountered in matching motivated students with eTwinning schools and eTwinning tutors.

ITE student-to-student project activities are often carried out by fewer motivated students with a good level of English and on a voluntary basis, with different levels of formal recognition involved in each situation. But there are also other cases, like Roma Tre University and University of Basilicata, where almost all students of a certain course year are involved in ITE projects. The implementation of "regular" eTwinning projects during their placement, in collaboration with their school-tutor, usually happens in the last years, when students are more experienced and are asked to co-design and implement their own project in class. Students that live the "full eTwinning experience" with pupils at school, may write their final thesis on their eTwinning activities.

Ideally, and this usually happens in time, a more holistic systematic path is built in, with different type of activities and trainings in different course years, so that students may experience a gradual approach and a steady continuous training on eTwinning, with a balanced combination of theory and practice. So, for instance, there could be a general introduction to eTwinning and Erasmus+ in the first years, with some best practices shown, and a more in depth and hands-on training in the following years, for instance in a English as a Foreign Language or Technologies Lab, together with some ITE student-to-student project activities during indirect internship, accompanied, whenever possible and usually in the final years of the course, with some real eTwinning experience in host schools, during students' direct internship (BOX 1.2).

Formal recognition given to eTwinning's activities varies in each university. This is not only relevant evidence of the level of curricular integration, as formal recognition is strictly linked to inner procedures and rules but has also proven to be a very important success factor in motivating students, especially for project activities, that are often very demanding and difficult to quantify. Typical recognition approaches envisage participation certificates, contribution to the exam grades, recognition of certain number of hours for internships or laboratories, extra points for the final grade of the thesis, creation, or recognition of an eTwinning ECTs. Specific universities approaches are detailed in CHAP. 2.

Even though the years of experience are not the only variables involved, the time factor is indeed a crucial one, as universities are bureaucratic bodies that need a lot of time to change internal dynamics and to officially integrate a new practice. Organizational rules about teaching, contents and students' internships are relatively strict and

cannot be changed so easily. Therefore, especially at the beginning of the ITE initiative in Italy, the possibility of eTwinning's integration often rested on the ability of its promoters to find the right leverages to introduce eTwinning, in each given situation, and from there start lobbying internally to gradually reinforce its integration. Sometimes it would change collocation in time, until it would find and occupy its ideal placement within the university curriculum, at least for that given context and time. Usually, curricular integration is a gradual process, made of small steps to be taken once at a time, and progressively bringing to a satisfactory level of integration, where eTwinning activities are distributed on different course years and modules/subjects, they are officially recognized (grades, hours, credits) and described in official documents.

BOX 1.2

An example of possible activities in an eTwinning module of 10-25+ hours

- A general introduction to the European School Education Platform (ESEP) and the eTwinning Community and an overview of other Erasmus opportunities (2 hours).
- eTwinning Projects 1: from project planning to project management, focus on distant collaboration and project documentation, with practical examples (2 hours).
- Registration and list of tasks to explore the platform (2 hours).
- eTwinning Projects II: best practices and tools for distant collaboration and documentation (2 hours).
- eTwinning Groups and TwinSpace: hands on exercise in a group or training project in order to familiarize with the virtual classroom and its tools (2 hours).
- Additional hours in case of project planning simulation activities, where students are asked to plan their own eTwinning project, alone or in small groups, as a final output, possibly in English, especially if within the English Lab.
- Additional hours in case of participation to an ITE project.

1.8 Research activities

The number of students who write their graduation dissertation on eTwinning is steadily increasing as eTwinning ITE spreads and becomes better integrated in universities. Often their thesis is linked to their first-hand eTwinning experience during their placement, as result of an action research at school. In some cases, there has also been some PhD theses, like the one applying Learning Analytics to eTwinning's data, by a student of the University of Florence (Gabbi, 2023). The number of other research and dissemination activities is growing constantly too, like articles on academic journals and school magazines, contributions to publications, posters and speeches in international conference, even though it is very difficult to monitor such a vast and heterogeneous scientific production.

It may be interesting to have a quick glimpse at the themes addressed by the students in their theses, to see what aspects of eTwinning are capturing the attention of future teachers. Of course, it must be underlined that the thesis content largely depends on what subject eTwinning has been integrated in and what professors were available to supervise students' theses. Moreover, the Italian NSO does not have at the moment an exhaustive list of all dissertations ever written on eTwinning in ITE universities, but only a list of the most recent ones, referring especially to years 2021 and 2022, and even that only from 10 universities out of 267. Nevertheless, it still can give us an idea of the current strands of interest. A great number of theses concerns learning English as a Foreign Language, as English is usually the only vehicular language learnt at this school level in Italy and, in general, because it is often perceived as the ideal collocation for eTwinning. Nevertheless, it is interesting to notice that most of them actually deal with eTwinning's impact on teachers' competences and school practices, on citizenship, environment, inclusion, multiculturality and on how eTwinning can enhance pupils' learning. Most of them stem from first hand field experience and have an experimental approach.

Internships in Primary Education Science courses and their crucial role in eTwinning ITE

As internship has proven to be the first and most relevant collocation for eTwinning in ITE over the years, it may be important to discuss and explore further the role of traineeships in initial teacher education in Italy to better understand why and how it fits so well with eTwinning.

The role of internships in Primary Education Science courses is pivotal in shaping future educators, preparing them for the transition from being students to becoming professional educators. It provides them with hands-on experience in real educational environments, helping them understand the complexities and dynamics of classrooms and educational institutions. It allows them to apply the theoretical concepts they've learned in their coursework to real situations, translating concepts into effective teaching practices, and to observe experienced educators in action, gaining insights into effective teaching methods, classroom management techniques and strategies for student engagement. Internships also encourage students to reflect on their experiences, analyse their strengths and areas for improvement, and develop a habit of continuous self-assessment and professional growth, connecting them with educational professionals, mentors, colleagues and the broader school community in general. Successfully navigating real-world

^{7.} The titles have been taken from the 8 ITE Award applications of 2023, and those spontaneously documented by universities in the Italian eTwinning ITE Group. Among them, the bigger contributions come from Catholic University of Milan and University of Florence.

teaching situations during internships builds students' confidence in their abilities as educators and makes sure future teachers are highly motivated and competent.

The Ministerial Decree 249/2010 outlines the guidelines for the organization of the Degree in Primary Education Science:

In line with the indicated objectives, the Master's Degree program includes, alongside the majority of disciplines, one or more pedagogical-didactic workshops aimed at allowing students to personally experience the practical application of what they have learned in the classroom. Starting from the second year, it also includes mandatory activities of *indirect internship* (preparation, reflection, and discussion of activities, documentation for the final internship report) and *direct internship* in schools. The internship activities, totalling 600 hours or 24 university educational credits, must progressively expand from the second year of the program until the fifth year and must conclude with a mandatory report. The internship is supervised by teacher tutors and coordinated by part-time and full-time detached coordinator tutors and organizing tutors within the Degree Course. It encompasses observation activities, guided situational work, and activities where the student is fully autonomous. The program should be structured to include, starting from the second year, a portion of the internship in preschool⁸.

Internship in the field of primary education can vary among different universities in terms of organization, duration, methods, and hours allocated to direct and indirect internship. Nevertheless, we can spot some typical trends and characteristics.

The hours of *direct internship* are distributed progressively over four years, starting from Year 2, and are intended to provide students with practical experience in educational settings and classroom environments. Students are paired with school tutors in hosting schools (both primary and pre-primary) for hands-on work in a real school context aimed at making students progressively more autonomous and aware of their future profession, with increasing levels of complexity over the years.

The main objectives of direct internship include:

- Observation: students are required to observe classroom dynamics, the interaction between teachers and students, the teaching strategies employed, and the learning environment, especially in the first years;
- Active participation: gradually, students could become more actively involved in classroom activities, assisting teachers in daily tasks and thus gaining practical experience in teaching and classroom management;
- Lesson design: at a later stage, students might have the opportunity to design and conduct small lessons or activities under the supervision of experienced teachers;
- Reflection, analysis and documentation: during and after the internship, students
 are encouraged to reflect on their experience, analyse the challenges encountered, and
 the teaching strategies adopted, in order to enhance their pedagogical skills.

In the eTwinning context, it would be desirable that students trained on eTwinning could find an eTwinning favourable environment where they could observe and/

8. All translations of Italian texts in this volume are to be attributed to the authors.

or implement real eTwinning projects in class during their direct internship, in all or at least in some of the program years. Ideally, students could work in an eTwinning School starting form the first years of their internship, in order to be able to observe eTwinning practice at an early stage. In the following years, students may have a more active role in assisting their school-tutors in implementing a "regular" eTwinning project with other European schools; and finally, they could be encouraged to design their own eTwinning project to be implemented in class, in collaboration with their school-tutor. This is usually the case of last year students, that may also write their thesis on their eTwinning experience. Moreover, when students have carried out a successful project, they may be encouraged to apply for eTwinning Quality Label, meaning they have to make sure the project has reached certain quality standard in terms of innovation, collaboration, results/impact, curricular integration and use of ICTs, and its activities have been well documented in the TwinSpace. Writing the application form, students and teacher have to describe and reflect on what they have done and carry out a thorough project evaluation, thus fulfilling a very important objective of the internship itself.

Unfortunately, even for those universities that have recognized the value of this experience and are willing to have their students experiment the "real" eTwinning during their placement, it is often a big challenge to match students' preferences and geographical distribution with existing eTwinning schools and hosting tutors, expert in eTwinning or at least willing to include eTwinning in their daily routine. In fact, in some cases, trained students have acted themselves as a driver of innovation, introducing the eTwinning practice in their hosting school. In order to encourage this practice, in some cases, a letter was sent by the university to hosting schools' headmasters, alerting them of the arrival of a student trained on eTwinning and making them aware of the importance of taking part to this joint eTwinning pilot among University, Regional School Office and INDIRE. In this way, a more favourable environment was built, supporting the introduction of eTwinning during students' placement period, and beyond. In some regions, an effort has been made to involve as much as possible also hosting schools and school tutors, inviting them to events and offering ad hoc training, as they feel that experiencing eTwinning in its real context at school would be the most effective way to train future teachers on eTwinning.

Indirect internship involves activities that are not directly conducted within a school classroom but still contribute to the student's educational and professional development. Led by school teachers with a temporary secondment to universities, it introduces, accompanies and follows the students' placement in schools and acts as *trait d'union* between University and School: it allows for the presentation of tools and methodologies to be used in class, the comparison and collegial reflection on the different experiences made at school during the direct internship, the evaluation of the experience in class. The number of hours of indirect internships varies from university to university, but usually it involves fewer hours compared to direct classroom-based internships, spread across the duration of the program.

During indirect traineeship, students will have the opportunity to collaborate with experienced educators, educational psychologists or other specialists in the field, be involved in discussions, workshops and events that are focused on educational topics for children, parents or the local community. They might be tasked with creating educational resources, lessons' plans, or curricular materials that may then be used in class, during their stay at school. indirect internship has also an important role in elaborating and reflecting on students' practice in school during their placement, with the help of the Tutors, who act as mediators and mentors. Students might be asked to reflect on their design choices, class activities, or collaborative experiences, considering how these insights could inform their future teaching practices. During their internship, both direct and indirect, students may also engage in research projects related to educational theories, teaching methodologies, or pedagogical practices.

eTwinning has very often been introduced by ITE universities right in the indirect internship, as it seemed for many its natural collocation. As an online platform that drives innovative student centered teaching methodologies and fosters peer learning and continuous professional development, as a very practical training, focused on technologies, collaboration and project planning, but always with the right balance with curricular integration and pupils' learning process, eTwinning represents a perfect vehicle for introducing innovative practices in a real situation context, develop future teachers transversal competences and bridge the gap between University and School, thus fulfilling the main goals of indirect internship.

The possible contribution of eTwinning in indirect internship can be especially evident in the following areas:

- Educational planning and design can be easily supported with eTwinning activities, for instance when students are asked to plan an eTwinning project and innovative lesson plans in a simulated environment with students from their own university or from partner ITE institutions. Those activities may then also be used by them or other collaborating teachers in real future eTwinning projects or class activities;
- Collaboration with education professionals and community engagement: eTwinning ITE training is held by expert in-service teachers, thus putting students in contact with external resources and giving them still another, practical, point of view. Furthermore, students are often invited to participate in eTwinning seminars and workshops together with regular teachers and tutors and/or take part to schools' open days where eTwinning projects are presented to the families and local authorities, thus interacting with the broader community;
- Observation, reflection and documentation: in the context of eTwinning's ITE training, students are often asked to discuss their placement experiences and the methodologies studied with students and teacher educators from other universities. By learning to use the platform and entering eTwinning's community, they get in touch with students and teachers all over Europe and beyond, with whom they can compare, discuss and learn from each other. By using the TwinSpace and working on eTwinning projects, moreover, they learn to effectively document students' activities;

- eTwinning's flexible and gradual approach to professional development, chosen voluntarily by each teacher according to its starting competences and preferences, together with the possibility to collaboratively practice what has been learned in a real situation context, through distant online project collaboration and an effective use of technologies and a vehicular language, make of eTwinning a very effective teacher training model that can easily be transferred to the ITE context and sustain future teachers' professional development. Furthermore, its project-based approach naturally conveys innovative methodologies like competency-based teaching, situated and student-centered learning, and thus a whole set of crucial competences for the future teacher;
- Finally, in the eTwinning ITE context, a growing number of students over the years have carried out *research activities*, both at graduate and post-graduate level, over eTwinning and its impact on pupils' learning process and on teachers' professional development, often writing about their first-hand experiences in student-to-student ITE projects or in regular eTwinning projects carried out during their placement.

University tutors play a crucial role in supporting and guiding students during their internships, both direct and indirect. Their role involves various responsibilities aimed at facilitating the learning and professional development of students, acting as mentors and guides, helping students bridge the gap between theoretical knowledge and practical application. Even though tutors' specific roles and titles might vary between different institutions and programs, there are usually two roles: the tutor organizzatore (Organizing tutor) focuses more on the logistical and administrative aspects of the internship, ensuring that everything is set up for the students' engagement, while the tutor coordinatore (Coordinating tutor) focuses on the educational and developmental aspects, guiding students in their learning journey and helping them achieve their learning goals.

Given the importance and crucial role of internship in future teachers' development, its natural bond with eTwinning, and the crucial role played by tutors in it, it becomes apparent how important it is, for the present and future development of eTwinning ITE, to invest in university tutors' training and to motivate them into active participation.

In fact, drawing upon their school background and experience but also consistently engaging with students on a day-to-day basis and providing guidance throughout their academic journey, university tutors have a unique perspective that, paired with their hands-on approach, can help find the most effective deployment of eTwinning within the framework of early education. Of course, as seen in the previous paragraphs, it is fundamental that there is a strong political engagement and support by university professors and higher management, in order to assure effective curricular integration and sustainability in the long run, but if duly motivated and engaged, tutors can become the heart of eTwinning ITE.

In the most successful eTwinning integration in ITE universities in Italy, we can observe a balanced combination of these two aspects: a relevant political will to integrate eTwinning in a stable and continuous way in the course program (formal

| | a.y. 2021-22 |
|----------|-------------------|
| | ience course (|
| | Education Sc |
| | s in Primary |
| | ing activitie |
| | ng ITE training a |
| I | y of eTwinnir |
| TABLE I. | Summar |

| TABLE 1.1 Summary of éTwinning 1TE ti | training act | tivities in P | TABLE 1.1 Summary of eTwinning 1TE training activities in Primary Education Science course (a.y. 2021-22) | | | | |
|--|-----------------------|--|--|------------------------------|--|----------------------|----------------------|
| University | Total No. students | Weighted average of training hours | Description of training activities | No. hours per module/year | No. trained students per module/year | Course year (1 to 5) | Trend |
| University of L'Aquila | 009 | 4 | Compulsory general introduction during indirect internship | 4 | \$00 | 4,5 | ~ |
| | | | Compulsory indirect internship workshop | 4 | 100 | 4,5 | |
| | | | Optional indirect internship workshop | 12 | 20 | 4,5 | |
| University of Basilicata | 220 | 13.26 | Compulsory course lessons: Educational Techno- | 9 | 06 | 4 | + |
| | | | logies for Innovation | ; | (| | \ |
| | | | Compunsory Lab mixed to ressons. Lencational Technologies for Innovation | 71 | 0 | 4 | |
| | | | Compulsory course lessons: Theory and Methods of School Assessment and Planning | 6 | 04 | 71 | |
| | | | Compulsory Lab linked to lessons: Theory and | 91 | 130 | 7 | |
| | | | Methods of School Assessment and Planning | | | | |
| | | | (2 Labs of 65 students) | | | | |
| | | | Compulsory indirect internship | 6 | 130 | 7 | |
| University of Bergamo | 61 | 12 | Optional introductory training course | 12 | 61 | к | |
| Free University of Bozen-Bolzano | 47 | 4.43 | Compulsory indirect internship | 4 | 89 | 4 | \ |
| | | | Optional training | 14 | 15 | 4 | |
| University of Cagliari | 9 | 30 | Optional indirect internship | 30 | 9 | 4,5 | |
| University of Calabria | 205 | 15 | Compulsory Educational Technologies Lab | 15 | 205 | 2, 4 | $\uparrow\downarrow$ |
| | | | | | | | |

| TABLE 1.1 (following) | | | | | | | |
|---|-----------------------|---|--|------------------------------|--|----------------------|-----------------------|
| University | Total No. students | Total No. Weighted students average of training hours | Description of training activities | No. hours per module/year | No. trained students per module/year | Course year (1 to 5) | Trend |
| Catholic University of the Sacred Heart of Milan | 514 | 25 | Compulsory English Lab (Year 4); optional CLIL Lab activities (Year 5) | 14 | 514 | 4,5 | $\uparrow\downarrow$ |
| European University of Rome | 70 | 4 | Optional indirect internship | 4 | 70 | 4,5 | \ |
| University of Florence | 811 | 8.34 | Optional English Lab | OI | 38 | ~ | $\uparrow \downarrow$ |
| | | | Optional indirect internship Year 2 (4h) Year 3 (4h) Year 4 (8 h) Year 5 (16h) | ∞ | % | 2, 3, 4, 5 | |
| University of Genoa | 06 | 91 | Compulsory Educational Technologies Lab | 91 | 06 | 4 | $\uparrow\downarrow$ |
| "Kore" University of Enna | 640 | 4 | Compulsory indirect internship Year 3 (280 students) Year 5 (280 students) | 4 | \$60 | 3,5 | |
| ; | | | Compulsory English Lab | 4 | 80 | > | • |
| Mediterranean University of Reggio Calabria | 180 | 26 | Compulsory indirect internship | 26 | 180 | 4 | |
| University of Molise | \$0 | 9 | Compulsory English Lab | 2.4 | \$0 | 3, 4 | \ |
| University of Padua | 200 | 5.25 | Compulsory intro in the course lessons: Methodologies, Didactics and Technologies for Teaching Oprional bands-on Lab within indirect internship | 2 3 | 150 | 7 2 | ~ |
| | | | direction and the direction of the direc | 1 | 2 | + ; | |

| | | | | | \ | • | 7 | • | \ | \ | |
|---|--|---|---|------------------------|-------------------------------------|----------------------|------------------------|---|------------------------------|---|------------------------|
| I | I | 7 | 3, 4, 5 | > | 2, 3, 4, 5 | > | ~ | 4 | ~ | I | 7 |
| 300 | 300 | 280 | 800 | 260 | \$62 | 350 | 180 | 200 | 55 | 100 | 100 |
| ∞ | 41 | 24 | 12 | 32 | 4 | 50 | 7 | ~ | 25 | 4 | 24 |
| Compulsory course lessons: Educational Technologies for primary and pre-primary education | Compulsory Lab within the course: Educational Technologies for primary and pre-primary education | Compulsory Educational Technologies Lab | Compulsory indirect traineeship (4 hours each year) | Compulsory English Lab | Indirect internship and English Lab | Optional English Lab | Compulsory English Lab | Compulsory Educational Technologies Lab | Optional indirect internship | Compulsory general introduction English Lab | Compulsory English Lab |
| 17.58 | | | | | 4 | 20 | 2.52 | | 25 | 41 | |
| 1,640 | | | | | \$62 | 350 | 380 | | \$\$ | 700 | |
| University of Palermo | | | | | University of Perugia | Roma Tre University | University of Salerno | | University of Turin | University of Verona | |

recognition, reference in official documents, research activities and active participation in national and international conferences) and an enthusiastic participation of a collaborative group of tutors and professors working together in ITE projects and hands-on activities in the eTwinning community (TAB. I.I).

1.10 Conclusions

The long experience in the eTwinning ITE and the quality and consistency of its universities' involvement makes of Italy one of the most active countries in this initiative. The reason for its success lays in various factors: the very flexible approach adopted by the Italian NSO, that would allow for adjustments to local preferences, needs and priorities, and the autonomous development of different models of curricular integration and project participation; the strength and effectiveness of eTwinning's regional network, made of active and enthusiastic ambassadors and regional representatives with strong connections to universities, able to help with the lobbying towards new potentially interested institutes; the ample space left to peer learning and practices exchange among involved universities and the documentation and dissemination of ITE's results (starting from 2017 an annual coordination meeting was organized, gathering involved universities, ambassadors and Regional School Authorities); the fact that, aiming at long term sustainability, NSO and ambassadors trained, whenever possible, not only students but also teacher educators, and tried to involve and motivate a group of actors within the universities in order to create an eTwinning team; the receptiveness of universities' management that seemed mostly welcoming an initiative that would answer to their needs for internationalization of their curriculum and reinforcement of their Third Mission. And of course, the big investment by the Italian NSO, that understood from the very beginning the affordances of such pilot initiative, spotting its big potential in terms of credibility and academic relevance and in mainstreaming the Action by massively shaping future eTwinning teachers. In fact, the ITE initiative fits perfectly into the overall professional development plan of the Italian NSO, that highlights the importance of continuity in teachers' professional development. An effort has been done over the years to introduce eTwinning in all phases of teachers' training, from initial training (cf. Bettini, Felice, Tosi, 2022) to the compulsory training during their probational year, up to the in-service training (cf. Nucci, Tosi, Pettenati, 2023).

One of the main difficulties for new teachers to uptake eTwinning and integrate it in their daily routine has always been the lack of time, and in some cases of familiarity with a vehicular language and ICTs. This is mainly because at the beginning, eTwinning is usually seen as something extra to do, a burden that busy teachers don't want to take on; something new to learn that would radically change their way of teaching and managing the class. Of course, a certain resistance to change is understandable and in the nature of the human being, except for the enthusiastic early adopters.

The most difficult task for NSO is not as much to attract new teachers, as to keep them engaged for the time necessary for them to see and understand on their own the added value of eTwinning. Teachers that may occasionally follow some training on eTwinning, then have to go back to their class, where they may feel alone and not motivated enough to carry out a radical change in their way of teaching. This is why it is so important to provide a support network and training follow-up that goes beyond the single training episode, as well as to offer training continuity in time; at least at the beginning, when teachers are most fragile and may easily give up, and before teachers have created their own network of peers. And here in particular lays the added value of the eTwinning Community, the network of ambassadors and the continuity of the training offered. As the research has confirmed, a continuous and active participation to the community corresponds to teachers' greater professional development and engagement. In this perspective, the importance of starting training on eTwinning during teachers' initial education becomes even more evident. It allows, in future trainings, to build upon previous knowledge, reinforcing competences and gaining familiarity with the environment, both from a pedagogical and technological point of view, and acquiring the required self-confidence to integrate a new way of doing school with eTwinning once they have the opportunity.

References

- BETTINI E., FELICE G., TOSI A. (2022), eTwinning nella formazione in ingresso: esperienze regionali e prospettive nazionali, in M. C. Pettenati (a cura di), L'anno di formazione e prova degli insegnanti dal 2015 ad oggi. Cronistoria di una ballata popolare, Carocci, Roma, pp. 318-35.
- GABBI E. (2023), Learning Analytics per lo sviluppo professionale. Un approccio metodologico allo studio delle comunità di pratica, FrancoAngeli, Milano (https://series.francoangeli.it/index.php/oa/catalog/view/978/832/5532).
- NUCCI D., TOSI A., PETTENATI M. C. (2023), The Impact of eTwinning on Continuing Professional Development of Teachers in Italy: Studies, Highlights and Prospects of the Italian Community, Carocci, Roma.



Snapshots of eTwinning ITE in Italian universities (a.y. 2021-22)

2.1 University of L'Aquila¹

UNIVERSITY AND COURSE NAME: Università degli Studi dell'Aquila, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze umane

YEAR OF FIRST PARTICIPATION: 2019

CURRICULAR INTEGRATION:

- Course year: 4th and 5th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): indirect traineeship during 4th and 5th year
- Formal recognition: eTwinning is mentioned in the Traineeship Regulations and counts as indirect internship

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 500 students for 4 hours; 100 students for 4 hours +
 10 students for 12 hours (project activities)
- eTwinning ITE project activities stud-to-stud: 10 students
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to past years: growing
- Links: eTwinning ITE "CIAO! Citizens International As One!" (https://twinspace.etwinning.net/233706/home) with Amsterdam University of Applied Sciences (Hogeschool van Amsterdam); Central University of Technology, Bloemfontein South Africa

eTwinning contributes to developing the initial teachers education because it offers an innovative learning environment that is made by a huge community of people who work at school. Planning an eTwinning project means to deal with different and up to date methodologies, based on projects, on problems, on using foreign languages to teach subjects (CLIL). eTwinning gives future teachers the opportunity to deal with a variety of meaningful pedagogical methods and techniques, in a cross-curricular and

ı. By Lia Molini, Teacher Educator, University of L'Aquila (lia.molini.lm@gmail.com); Roberta Giangiuliani, Teacher Educator, University of L'Aquila (roberta.giangiuliani@guest.univaq.it).

multidisciplinary context. Innovative pedagogical approaches and teaching proposals encourage active, autonomous learning (information gathering, comparative work, problem solving, collaborative creation etc.).

Collaboration with other colleagues in Europe stands for improving language and digital skills, for enhancing the European, international and intercultural experience. Collaboration with peer teachers of other countries represents an effective way to develop a multi-perspective understanding of how people in different regions perceive life, education, learning and related global issues. Teachers and pupils can communicate under challenging circumstances (time zones, technological challenges) and acquire key language skills; they learn to collaborate respecting the perspectives present within an international team. Intercultural issues are difficult to deal with if there are not practices, no experiences to talk about. eTwinning is a pedagogy of action, that is the real experience to live to understand, to explain intercultural education.

At the beginning of our experience, student teachers showed some mistrust in their involvement in an eTwinning project because of their fear of communicating through the English language. They were asked to collaborate in mixed teams to discuss topics related to the Global Sustainability Goals. The positive working atmosphere created around ice-breaking and communicative activities, such as creating a logo, sharing a code of conduct and a netiquette, and interviewing a partner regarding his National School System, got the best, and student teachers were enthusiastic, as proved through a survey overview. Team work, planning a lesson and using technology constitute basic competencies required for future teachers. In the end, each team expressed their ideas and their gained understanding of acting as a global citizen by creating an audio-visual presentation.

Working in international teams can be an added value also to understand, to practice and to experience the building of an international and vertical curriculum: the tutees share aims, practices, but they also discuss how to suit the activities for different grades, from primary to secondary school.

Moreover, as change agents, teachers have the opportunity to influence all children and young people positively: eTwinning can be the challenge of how to develop innovative and inclusive pedagogical practices through values, skills, knowledge and attitudes required for democracy, citizenship, intercultural dialogue and personal development. The integration of eTwinning into one or two modules during their initial training and the involvement of students in one eTwinning project with other universities or at school during placement are relevant actions to encourage the action-research and to enhance students' competences at the end of their university career. The tutees can compare different school systems, they can study similarities and differences, they can focus on specific topics in order to improve some local practices.

According to questionnaires and online surveys that students have been invited to fill in, students are more involved when they can act on the platform and on the TwinSpace during their university training, where they experience the platform tools and also how to plan school projects, and when they participate into small collaborative eTwinning projects among teacher trainers and/or student teachers at local and

international level. They appreciate the holistic approach to learning: in and with eTwinning teachers address the emotional, social needs of students in an integrated learning format, where they can find innovative methodologies, digital resources and tools, interesting and up-to-date contents.

Being an eTwinning teacher means to belong to a huge learning community, made of lots of teachers supporting each other: it contributes to raising the importance of self-confidence and in trying strategies that can boost efficacy and learning outcomes.

2.2 University of Basilicata²

UNIVERSITY AND COURSE NAME: Università degli Studi della Basilicata, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze umane

YEAR OF FIRST PARTICIPATION: 2020-21

CURRICULAR INTEGRATION:

- Course year: 2nd and 4th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): 4th year lessons (optional) + Lab activities (compulsory) in Didactics of Technological Innovations and in Theory and Methods of School Planning and Evaluation + 2nd year indirect internship (compulsory)
- Formal recognition: presence in official documents (syllabus), laboratory credit recognition

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 4^{th} year, 90 students for 18 hours; 2^{nd} year, 65 students for 16 hours and 140 students for 9 hours
- eTwinning ITE project activities stud-to-stud: 220 students
- No. students that carried out a "normal" eTwinning project during their traineeship at school: 30 students
- Trend compared to previous years: strong growth
- Links: eTwinning ITE "Enjoy... STEM!" (https://twinspace.etwinning.net/197764/pages/page/1764934)

The eTwinning Initial Teachers Education (ITE) initiative aims to introduce eTwinning to future teachers as a tool to facilitate a different way of teaching, through the use of new technologies, communication in a foreign language, learning in a collaborative and multicultural context. In Basilicata, the eTwinning project in initial teacher education provides valuable support to promote a collaborative learning dimension,

2. By Marika Calenda, Associate Professor of Didactics and Special Pedagogy, Department of Human Sciences, University of Basilicata (marika.calenda@unibas.it); Alessio Fabiano, Researcher, Department of Human Sciences, University of Basilicata (alessio.fabiano@unibas.it).

where students can develop aspects of communication, conversation, flexibility and the sharing of perspectives within a space of dialogue and listening, both real and virtual (Boffo, 2015). For students of Primary Education of the University of Basilicata, the eTwinning learning experiences help to create the conditions to open up to initial teacher education that is partly different from the curricular one and to introduce a training methodology specifically oriented to the development of competences, in particular, linguistics (in English, digital competence and soft skills (Gulbay, 2017; La Marca, Gulbay, Di Martino, 2018; La Marca, Gulbay, 2018), fundamental for the achievement of the objectives of initial teacher education (Ministerial Decree 249/2010). The benefits of the eTwinning initiative for the academic system of training prospective teachers are manifold. The social and emotional connection facilitated by Information and Communication Technologies (ICT) plays a decisive role in innovative learning environments and, more specifically, the role of teacher collaboration across networks is crucial in fostering the dissemination of innovative pedagogical practices. Bocconi, Kampylis and Punie (2012) argue that by providing teachers with concrete opportunities to broaden the discussion on innovation promoted by the dissemination of ICT for learning, as tools for sharing pedagogical know-how and educational content, networks such as eTwinning can contribute to accelerate educational change and spread pedagogical innovation at the system level, nurturing the connections between local teacher communities and the school system. eTwinning is a concrete example of how innovation for ICT-based learning can be implemented on a large scale.

The eTwinning initiative in Basilicata is helping to renew the training methods of future teachers. From a systemic perspective, involving teachers through the mechanisms of social networks, eTwinning offers online services that support teachers' connection, fostering collaboration and networking with real-world actors: teaching staff, experts, teacher trainers, eTwinning ambassadors. The eTwinning project proposed in the academic year 2021-22, "Enjoy... STEM!", is closely linked to the curriculum, it helps to support the dialogue between the different disciplines by using and/or recreating open educational contents, such as didactic planning and micro-planning. In this way the eTwinning initiative in future teachers of Basilicata influences teaching/ learning practices through meaningful activities that promote transversal skills, such as problem solving, creativity, communication and intercultural awareness (Crawley, Gilleran, 2011; Bocconi, Kampylis, Punie, 2012). eTwinning planning introduced a training methodology that involved students of the Degree Course in Primary Education of the Catholic University of Milan and of the University of Basilicata in collaborative learning experiences, shared planning, in the perspective of internationalization, on innovative teaching methodologies, such as the Content and Language Integrated Learning (CLIL) methodology, the Situated Learning Episodes (Episodi di apprendimento situato, EAS) method (Rivoltella, 2013) and the CLIL method with EAS (Leone, Luzzini, 2016).

REFERENCES

- BOCCONI S., KAMPYLIS P., PUNIE Y. (2012), Innovating Learning: Key Elements for Developing Creative Classrooms in Europe, Publications Office of the European Union, Luxembourg.
- BOFFO V. (2015), eTwinning Traineeship all'Università degli Studi di Firenze. Un modello di internazionalizzazione per il corso di studio in Scienze della formazione primaria, https://flore.unifi.it/retrieve/handle/2158/1003344/41218/eTwinning%20Traineeship%20at%20the%20University%20of%20FlorenceFinal_June2015.pdf.
- CRAWLEY C., GILLERAN A. (2011), eTwinning Cookbook: 50 Recipes for School Collaboration and Professional Development in Europe, Central Support Service for eTwinning, European Schoolnet, Brussels.
- GÜLBAY E. (2017), Web tools per promuovere l'apprendimento collaborativo nella formazione iniziale dei futuri insegnanti, in Proceedings of SIRD (Società italiana di ricerca didattica), La professionalità degli insegnanti. La ricerca e le pratiche (Bari, 14-15 aprile 2016), Pensa multimedia, Lecce-Rovato, pp. 317-24.
- LA MARCA A., GÜLBAY E. (2018), *Didattica universitaria e sviluppo delle* soft skills, Pensa multimedia, Lecce-Royato.
- LA MARCA A., GÜLBAY E., DI MARTINO V. (2018), Strategie di apprendimento, stili decisionali e uso consapevole delle tecnologie nella formazione iniziale degli insegnanti, in "Form@re. Open Journal per la formazione in rete", 18, 1, pp. 150-64.

LEONE V., LUZZINI M. (2016), Fare CLIL con gli EAS, La scuola, Brescia.

RIVOLTELLA P. C. (2013), Fare didattica con gli EAS, La scuola, Brescia.

University of Bergamo³

UNIVERSITY AND COURSE NAME: Università degli Studi di Bergamo, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze umane e sociali

YEAR OF FIRST PARTICIPATION: 2021

CURRICULAR INTEGRATION:

- Course year: 3rd
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): indirect traineeship on 3rd year (2nd year of traineeship) on a voluntary base
- Formal recognition: up to 12 hours of indirect internship for the attendees of the eTwinning introductory training course

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 12 hours online for 61 students and 8 tutors, ²/₃ synchronous and ¹/₃ asynchronous.
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to past years: growing fast
- 3. By Roberta Grassi, Associate Professor in Language Didactics, University of Bergamo (roberta. grassi@unibg.it).

The main goal in implementing eTwinning in the primary teachers' initial education at the University of Bergamo is to improve the abilities and possibilities of prospective teachers to interconnect with other school contexts across Europe, and so to learn and exchange best practices as well as expand international networks. eTwinning allows to enhance action research and methodological innovations with specific but not exclusive reference to ICT, therefore resulting in higher competences in the new generations of teachers.

The students who participated in the training course did not know the eTwinning platform and had no previous experience of international collaboration. Three female students participated before starting an internship abroad within the Erasmus project. The participating coordinating tutors also had no previous experience of face-to-face or remote international exchange. No one was already registered in the eTwinning environment and all showed interest and active participation during the presentation meetings of the platform, appreciating its functionality and immediacy of use. The group project planning activities coordinated by the ambassador teachers were particularly welcome even if the path was limited to operational hypotheses without concrete implementation in collaboration with other students or schools. Many of the participants mentioned in their personal portfolio the training course in eTwinning as a significant experience that characterized their year of studies. Some students expressed the desire to complete the activities hypothesized during the training course in the next academic year, during the internship or in service.

2.4 University of Bologna⁴

UNIVERSITY AND COURSE NAME: Università degli Studi di Bologna, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze della formazione primaria

YEAR OF FIRST PARTICIPATION: 2016-17

CURRICULAR INTEGRATION: no activities in a.y. 2021-22

The University of Bologna started working with eTwinning in the spring of 2017 when it participated in both the national and European ITE coordination meetings. The resulting interest led to it being included in the regional initiative "School and University in dialogue". In the academic years 2016-17 and 2017-18, there were three training sessions entitled "eTwinning and European planning" for nursery and primary school-teachers in Emilia-Romagna, with the aim of building bridges between school and university and directing the activities of student teachers. For students to be able

^{4.} By Elisabetta Scaglioni, Academic Internship Tutor and Erasmus+ School Ambassador, University of Bologna (elisabetta.scaglioni@unibo.it).

to carry out profitable internships in eTwinning, it is important that host teachers in schools know the platform and the opportunities it offers.

In 2018, a Degree thesis on eTwinning entitled eTwinning All Around the World was discussed for the first time at the University of Bologna. The student highlighted that, in her opinion, the charm of the eTwinning platform consists in the linear harmony between all the essential elements for the growth of the future man: communication in the mother tongue and foreign language, collaboration between peers, development of community projects, inclusiveness, use of technologies.

From 2017 to 2020, eTwinning was included in the indirect internship of the 5th year, that is, within the meetings held by the internship tutors; the activities had a practical-operational slant, aimed at developing an eTwinning project. Students were really motivated.

In the same years, projects were activated both between students at various Italian universities teaching Primary Education and projects extended to European universities. For both types of projects, in English, four meetings of four hours each were planned for a group of 20 students chosen by the English teacher. This active participation was recognized by the students as an extraordinary opportunity to experience eTwinning step by step: from planning to evaluation.

In 2019, all internship tutors participated in a specific eTwinning ITE training session with the aim of promoting sustainability and transferability.

In 2020 a second Degree thesis on eTwinning was discussed, entitled *Motivation* in the Study of English as L2 in Primary School through the eTwinning Platform: The Case of the Vignola (MO) Didactic Directorate. It was an experimental thesis that started from the following hypothesis: could the eTwinning experience carried out in primary school lead to a greater motivation to study the English language by lower secondary school pupils, and instil an evident cultural interest and awareness of the importance of language study? The hypothesis was confirmed by the evidence gathered through the administration of questionnaires.

No activities were carried out in the last academic year (2021-22) due to organizational problems, but the intention is to resume the eTwinning initiative soon, which is much appreciated by students who note an improvement in their skills and above all an excellent usability of what they have learned and experienced.

2.5 Free University of Bolzano⁵

UNIVERSITY AND COURSE NAME: Libera Università di Bolzano, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze della formazione, Ufficio tirocinio

5. By Maria Elena Picone, Placement Coordinator Tutor, School Ambassador (e-Twinning Erasmus+), Free University of Bozen-Bolzano, Faculty of Primary Education (mariaelena.picone2@unibz.it).

YEAR OF FIRST PARTICIPATION: 2020

CURRICULAR INTEGRATION:

- Course year: 4th (indirect traineeship)
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): compulsory workshop indirect training + optional 5 hours workshop and/or in presence in the eTwinning hosting schools
- Formal recognition: recognition in the digital student portfolio; certificate of attendance for the hours spent in the eTwinning schools; $\mathbf{4}^{th}$ year exam

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: all 4th year students (59) attended a compulsory workshop of 2 hours. In addition, 15 4th year students attended an optional workshop for a total of 14 hours, of which 5 were spent in the eTwinning schools
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school: 15
- Trend compared to past years: growing fast

The Faculty of Education of the University of Bolzano⁶ is located in Bressanone/Brixen (Alto Adige/South Tyrol), at the cultural and economic threshold of German and Italian countries. The trilingual didactics and research and the high level of internationalization are an added value to the university.

We have been offering eTwinning training to Year 4 students since academic year 2020-21 because we believe that future teachers need to gather expertise in national and international contexts in order to develop skills, awareness and know-how in problem solving, task-based learning and teaching and the use of digital tools. eTwinning scaffolds Year 4 indirect and Year 5 direct training on international and multilingual scenarios that relate to the characteristics of our university.

Our online and/or blended workshops, that are carried out thanks to skilled eTwinning teachers, placement tutors and Erasmus/eTwinning ambassadors, have a double focus:

- a) familiarize with the eTwinning platform, its tool kits and learning opportunities;
- b) build up a network of contacts among students, tutors, experts.

All Year 4 students attend a 2 hours compulsory eTwinning workshop, followed by a plenary presentation with the help of students from the previous years.

Interested students can engage in an extra 14 hours optional workshop that includes university lessons as well as training in small groups at eTwinning schools. After this, students are asked to present their experience and its digital documentation to the plenary of students and their personal digital portfolio to their tutors, before taking the Year 4 exam.

Students observe but can also join the eTwinning projects of the hosting school during their traineeship and engage in an eTwinning ITE Group, where they post a

personal presentation and upload or link the results of their training, for instance questionnaires, project timelines, project kits, escape rooms, slides or infographics.

So, in a nutshell, skills are acquired through observations, lessons, experiences, continuous feedback in group, tutor monitoring, gathering and sharing documentation that are success factors for teachers in their initial training as well as in-service.

So far, our university has had only a short experience, but we are adamant thank to the positive students' feedback suggesting inserting eTwinning workshops before Year 4 and a wider use of the showcased tools.

Last but not least, a dissertation on eTwinning, eTwinning Project: New Horizons to Support Innovative and Interdisciplinary Didactics, was recently discussed.

For the future, we would like to extend eTwinning beyond Year 4 and open up the circle of engaged teachers and tutors: by involving other placement personnel (Ladin and German) in our ITE Group, by organizing internal training and courses for hosting school tutors, by registering university professors to the platform and support its use within their teaching courses and by involving our tutor in her double role as teacher and recently nominated eTwinning ambassador.

2.6 University of Cagliari⁷

UNIVERSITY AND COURSE OF STUDY: Università degli Studi di Cagliari, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Pedagogia, psicologia, filosofia

YEAR OF FIRST PARTICIPATION: 2015-16

CURRICULAR INTEGRATION:

- Course year: 4th and 5th, students with a minimum level of A2/CEFR in English
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): the eTwinning laboratory was done within the indirect internship activities, on an voluntary basis
- Formal recognition: students have been recognized 30 hours of traineeship and 10 hours of English laboratory

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 6 students for 30 hours Lab, including project activities
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to past years: decreasing
- Links: the work of six students were organized in student-to-student mode. In this academic year some projects (visible in this link: https://groups.etwinning.net/219926) have been conceived. The projects will be realized in the next academic year 2022-23

^{7.} By Laura Pinna, Tutor organizing the internship in SFP, PhD Student in Philosophy, Epistemology, Human Sciences, Department of Pedagogy, Psychology, Philosophy and Child Education, Teacher at the University of Cagliari (l.pinna@unica.it).

eTwinning was introduced in primary and pre-primary teachers' initial education at the University of Cagliari in order to give students, through the use of the platform and the training opportunities, the possibility to interact with students from other European countries, share ideas, materials and projects, develop new skills in informatics, communication and foreign language and develop professional abilities as teamwork, didactic planning etc.

During the academic year 2021-22 only 6 students frequented 30 hours of laboratory dedicated to eTwinning. They were coordinated by tutor and ambassador Michela Pinna in collaboration with ambassador Alessandra Basso. The tutors worked with the students between January and April on the following activities: general presentation of eTwinning, illustration of the platform and its main features; registration to the platform; exploration of the online environment and hands-on work on the platform; exercises and activities in the *ad hoc* eTwinning Group created for ITE UniCa (Gruppo eTwinning ITE UniCa). Students specifically worked according to weekly planning (one or two times a week), participated to a seminar about eTwinning and University in collaboration with the Regional School Office for Sardinia; carried out project work activities in platform (20 hours).

During the past years, students have done many interesting experiences, shared ideas and learned other European realities. éTwinning laboratory's students have developed digital skills and a European spirit. With éTwinning they could experience the teaching practices in action, and were motivated to use new methodologies and increase the use of cooperative learning in internships groups with the éTwinning model. For example, some primary school students have interacted online with traineeship students from other universities.

Results from students' satisfaction questionnaires show that there has been an improvement in their English communication skills, especially written, and in project planning skills; that they have learned a new mode of working collaboratively and to share many ideas, for example with brainstorming. Working with other European realities in student-to-student projects has helped students develop their professional skills and has increased their self-confidence, making them understand that collaborating at distance in English was possible even if it seemed difficult at the beginning.

Students have very much appreciated the exchange with other European students, especially in the experience that has involved them produce books about child literature and the experience with pupils of first primary in the project "Baby Pot".

Overall, the feedback from the students was very positive on the Human, Academic and Didactic levels, especially in personal hospitality.

REFERENCES

BONIAUTI G., CALVANI A., RANIERI M. (2016), Fondamenti di didattica. Teoria e prassi dei dispositivi formativi, Carocci, Roma.

JOHNSON D. W., JOHNSON R. T., HOLUBEC E. J. (1994), Apprendimento cooperativo in classe.

Migliorare il clima emotivo e il rendimento, presentazione all'edizione italiana di M. Comoglio, Erickson, Trento.

UNITÀ NAZIONALE ETWINNING C/O AGENZIA NAZIONALE ERASMUS+ INDIRE (2018), Manuale al buon uso. Una guida pratica per iniziare a lavorare con i gemellaggi elettronici tra scuole europee, https://etwinning.indire.it/wp-content/uploads/2015/11/MANUA-LE-AL-BUON-USO-ETW-HI.pdf.

2.7 University of Calabria⁸

UNIVERSITY AND NAME OF THE COURSE: Università della Calabria, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Matematica e Informatica

YEAR OF FIRST PARTICIPATION: 2020-21

CURRICULAR INTEGRATION:

- Course year: 2nd and 4th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base):
- a.y. 2020-21: Teaching of "Assessment Theory and Methods" (an integrated teaching module on "Didactics and Assessment"), 2nd year, obligatory
- a.y. 2021-22: Teaching of "Didactics Technology" (an integrated teaching module on "Didactics and Methodology of Research"), 4th year, obligatory
- Formal recognition: part of the Exam

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 205 students for 15 hours
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school: 1 student
- Trend compared to previous years: stable

Professionally qualified teachers with appropriate soft skills are able to influence the interest and engagement of learners and understand complex situations in order to design teaching-learning processes suitable for a multidimensional education of the learner (Ngang, Yie, Shahid, 2015; Tang, 2018). We believe that due to its procedural and methodological features, eTwinning activities encourage the development of soft skills including *communication skills*, *ability to identify work goals*, *team group* and *problem solving* (De Pietro, Altomari, 2019). Our research team has initiated a survey, which is still ongoing, based on the hypothesis that the eTwinning laboratory helps students to mature soft skills to be brought to bear in the work environment. The sample size is about 500 students in Primary Education Degree Courses of some Italian universities.

In view of this, in the above-mentioned teachings, laboratory activities were de-

8. By Orlando De Pietro, Associate Professor, University of Calabria (orlando.depietro@unical.it).

signed and carried out according to the eTwinning methodology that enabled students, future teachers, to:

- I. learn about the opportunities offered by the eTwinning platform for innovative teaching focused on the development of key citizenship skills through the use of ICT;
- 2. learn about and use digital tools for teaching;
- 3. learn how to design and manage European projects;
- 4. collaborate and exchange project ideas with other European students as well.

Consequently, a strong connection, welcomed very positively by the students, has been made between pre-professional training and real job placement. eTwinning is therefore, in our opinion, the appropriate "tool" to build learning environments suitable for students to mature soft skills and to implement the relationship between *knowing how to be* and *knowing how to do*. We will, therefore, continue to activate eTwinning laboratories in future years.

REFERENCES

DE PIETRO O., ALTOMARI N. (2019), A Tool to Measure Teachers' Soft Skills: Results of a Pilot Study, in "Advances in Social Science and Culture", 1, 2, pp. 245-7.

NGANG T. K., YIE C. S., SHAHID S. A. M. (2015), Quality Teaching: Relationship to Soft Skills Acquisition, in "Procedia: Social and Behavioral Sciences", 191, pp. 1934-7.

TANG K. N. (2018), The Importance of Soft Skills Acquisition by Teachers in Higher Education Institutions, in "Kasetsart Journal of Social Sciences", 41, 1, pp. 22-7.

2.8 Catholic University of the Sacred Heart of Milan⁹

UNIVERSITY AND COURSE NAME: Università Cattolica del Sacro Cuore, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Facoltà di Scienze della formazione

YEAR OF FIRST PARTICIPATION: 2013-14

CURRICULAR INTEGRATION:

- Course year: 4th and 5th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): compulsory English
 Lab on 4th year; optional CLIL project activities on 5th year
- Formal recognition: 1 credit

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 514 students for 25 hours
- eTwinning ITE project activities stud-to-stud: 79 students in Year 4 and 5
- 9. By Vincenza Leone, Adjunct Professor, Catholic University of the Sacred Heart of Milan (vincenza.leone@unicatt.it); Marzia Luzzini, Adjunct Professor, Catholic University of the Sacred Heart of Milan (marzia.luzzini@unicatt.it).

- No. students that carried out a "normal" eTwinning project during their traineeship at school: 20 students
- Trend compared to past years: stable

The eTwinning initiative in the initial teacher education provides great support for internationalisation and for the development of the collaborative learning dimension between students from different universities and with schools too.

The panorama of information and training activities offered by the Catholic University is vast and involves the following types:

- training of university tutor organisers and coordinator tutors;
- development of laboratory projects among students of the Faculty of Education and students of other Italian and European universities;
- development of projects during the placement in schools with the involvement of the host tutors;
- preparation of theses that have eTwinning as the subject of study or that use
 eTwinning as a means to deepen other themes of foreign language teaching;
- opening of the academic year with an eTwinning conference in collaboration with the Regional School Authority for Lombardy as part of the regional eTwinning plan.

A training methodology is introduced that specifically focuses on the enhancement of the English language, internationalisation and the use of new technologies¹⁰. This is a very dear topic to eTwinning, as also underlined during the *Empowering Future Teachers with eTwinning* Online Conference (held on 24-26 November 2020) during which professor Pier Cesare Rivoltella spoke, highlighting the importance of eTwinning also for the development of digital skills.

Along with digital skills, the benefit for students also concerns soft skills, such as the ability to work in a team, present their ideas, design flexibility, and teamwork, which will be useful for entering the world of school. In this academic year, the projects "Working Together on Disinformation and Media Literacy" (4th year) and "Enjoy... STEM!" (5th year) allowed students to work on soft skills through collaborative learning. In the case of the first project, students worked on the eTwinning theme of the year 2021, offering participants the opportunity also to take a look at active citizenship. In the case of the second project, on the other hand, students worked on the theme of STEM, with the support of CLIL methodology, using the EAS¹¹ micro-units to design and plan (Leone, Luzzini, 2016) and later share it with the hosting tutors in schools.

University research, an essential topic for the Catholic University, thanks to eTwinning ITE, has been able to expand the opportunities for collaboration between

^{10.} M. Luzzini in ITE National Coordination Event (8-9 March 2021).

^{11.} Episodi di apprendimento situato (Situated Learning Episodes). Cf. https://rivistedigitali.erick-son.it/pedagogia-piu-didattica/archivio/vol-5-n-2/metodo-degli-eas-e-didattica-inclusiva-nella-scuo-la-delle-competenze/.

the involved universities, also offering students the possibility of transforming virtual mobility into a real encounter (Leone, Gillanders, Eirin Nemiña, 2020).

Students appreciate the opportunity to collaborate with other future colleagues at a national and international level, improving their planning skills. The didactic proposals for future teachers, also thanks to the project works, must not be the result of chance: «the teacher, director, must perfectly know the script to direct and not let the characters (students) act without reference points» (Leone, Luzzini, 2016, p. 41).

The use of virtual space has allowed collaboration even during the period of the pandemic, providing a further challenge and, at the same time, an opportunity to discuss even beyond the projects.

REFERENCES

LEONE V., GILLANDERS C., EIRIN NEMIÑA R. (2020), Tutoring Across the Borders of the European Union. How Initial Teacher Education Work Placement Can Be Supported: The Case of Italy and Spain, in "Idee in form@zione", 9, 8, pp. 121-43.

LEONE V., LUZZINI M. (2016), Fare CLIL con gli EAS, La scuola, Brescia.

2.9 European University of Rome¹²

UNIVERSITY AND COURSE NAME: Università Europea di Roma, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Facoltà di Scienze della formazione

YEAR OF FIRST PARTICIPATION: 2021-22

CURRICULAR INTEGRATION:

- Course year: 4th and 5th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): indirect internship, with elective participation and the involvement of recently graduated students
- Formal recognition: Certificate of Attendance

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 4 hours for 20 students
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school: I
- Trend compared to past years: slight growth

At European University of Rome our goal is to teach students of the course Scienze della formazione primaria to become teachers able to effectively meet the demands of today's

12. By Paolo Aghemo, Teacher Educator and Internship Coordinator, European University of Rome (paolo.aghemo@unier.it); Daniela de Simone, Teacher Educator and Internship Coordinator, European University of Rome (daniela.desimone:@istruzione.it).

complex education systems. Undoubtedly, one of those demands is to view the reference educational and cultural systems with a wide framework, open to a European and international dimension, while keeping in mind that nowadays' society, and therefore school system, is becoming increasingly multicultural and multiethnic. Those topics have always been of uttermost importance for our university and its Third Mission.

For this purpose, the university not only provides English language classes as a part of the Degree Course, but a CLIL course as well, where some of the subjects are taught directly in English. There is also a particular focus on the methodological-didactic competences necessary to teach the English language, acquired during a direct school internship.

Such an international calling automatically leads to an eager subscription to the eTwinning ITE initiative, which allows the enhancement of the university's educational curriculum in a practical and innovative way. It also gives a chance to students to register and be part of the eTwinning platform, allowing them to directly experience the internationalization of the educational system by exchanging views with students and/or teachers from the 43 participating countries and their corresponding educational and training systems.

The students were deeply interested in the proposal to be involved in the eTwinning ITE initiative, especially relating to the possibility to acquire fundamental expertise to combine multidisciplinary didactic planning with technological tools (Dig-Comp 2.1) and innovative and inclusive methodology, all of which will allow them to autonomously design eTwinning projects as teachers.

The first step in integrating eTwinning in the educational curriculum of future teachers was organizing training events with the help of eTwinning ambassadors who introduced the platform and shared their experiences, by introducing some meaningful projects as an example. This experience motivated the students to move their first step, which was subscribing to the platform and getting used to it. Some of them have already expressed the will to propose an eTwinning project while they will be doing their school internship.

The students' degree of fulfilment leads us to keep utilizing eTwinning in the Degree Course, with the addition of student-to-student eTwinning projects planning during the indirect internship, eventually leading to an increasing implementation in the laboratory and disciplinary activities.

2.10 University of Florence¹³

UNIVERSITY AND COURSE NAME: Università degli Studi di Firenze, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

13. By Ilaria Giachi, Teacher Educator, University of Florence (giachiilaria1@gmail.com); Laura Innocenti, Teacher Educator/Principal, University of Florence (laura.innox@gmail.com).

DEPARTMENT OF REFERENCE: Formazione, Lingue, Intercultura, Letterature e Psicologia (FORLILPSI)

YEAR OF PARTICIPATION IN THE INITIATIVE: 2012-13

- CURRICULAR INTEGRATION:
- Course year: 3rd year English Lab; from 2nd to 5th year indirect internship
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): indirect internship on a voluntary basis and compulsory English Lab
- Formal recognition: 1 additional point to the final Degree grade
- NUMBER OF STUDENTS AND HOURS:
- Training activities: 38 students for 10 hours (3^{rd} year English Lab); 80 students for the indirect internship (2^{nd} year 4 hours, 3^{rd} year 4 hours, 4^{th} year 8 hours; 5^{th} year 16 hours)
- eTwinning ITE project activities: 5 students involved in eTwinning ITE stud-to-stud projects between universities
- eTwinning projects with other eTwinning students or teachers and pupils of the host school: 12 students
- Trend compared to previous years: unchanged
- Links: eTwinning ITE stud-to-stud projects between universities:
- "Storytravelling through Places and Peoples" (https://twinspace.etwinning.net/102490/home)
 - "How Is Your Christmas" (https://twinspace.etwinning.net/216508/home)
 - "Creative Names" (https://twinspace.etwinning.net/223105/home)
- "Let's Improve Basic Language Skills with Digital Stories!" (https://twinspace.etwinning.net/229268)
 - "For Our Planet" (https://twinspace.etwinning.net/213938/home)

The University of Florence was among the first universities to participate in the experimental phase of this initiative (then TTI, Teacher Training Initiative, and now ITE), with a group of students and teachers who worked together in a TwinSpace for a comparative analysis of training methods and European curricula.

The model adopted by the University of Florence, as stated by Prof. Vanna Boffo¹⁴, fits perfectly within the FORLILPSI Department¹⁵ for some aspects that characterise it, such as the internationalisation dimension. Over the years the eTwinning internship has been officially recognized as an additional path that could be chosen by students, with well-defined methods, objectives and timings, as well as benefits for students, both at a methodological and didactical level, as well as with the attribution of an additional point in the evaluation of their Degrees.

During the 4th and 5th year ITE students are called to support their school tutors in eTwinning project activities during their placement, to put into practice what they have learned in the training meetings organised by the university tutors (student teacher educators) and in the seminars with eTwinning ambassadors. These

^{14.} https://flore.unifi.it/handle/2158/1003344.

^{15.} Department of Education, Languages, Interculture, Literature and Psychology of the University of Florence (in Italian: *Dipartimento di Formazione, Lingue, Intercultura, Letterature e Psicologia*).

opportunities are fundamental for the dissemination of good practices and for understanding eTwinning's potential, in order to develop a "healthy contagion of the virus", as stated in pre-pandemic times by the teacher Sabrina Iacoponi, an eTwinning ambassador.

The emerging methodologies in education, as we have seen, have required an increase in virtual and multimedia environments and become more effective through comparisons and exchanges of projects, which are also mediated by communication in a foreign language. For all these reasons, the ITE path becomes a resource for the development of digital, methodological, linguistic and intercultural skills. Under the supervision of university tutors and the coaching of school tutors, students get into contact with partners, plan and implement shared projects and interactive products, using the various digital tools and web apps (Padlet, Learning App, Sutori, Wordwall, Bookcreator, Mindmomo, Voki etc.), documenting the paths in the virtual space, purposefully prepared in the TwinSpace "Becoming Teachers" 16.

In eTwinning planning, the importance of the inclusive dimension is also stressed by focusing on collaboration, on different learning styles, on respecting the times and needs of each student; cross-curricular issues are also involved to enhance active citizenship, also in reference to the objectives of the Agenda 2030 for Sustainable Development.

From student feedbacks, also uploaded in the "Evaluation" session of the TwinSpace "Becoming Teachers"¹⁷, it emerges that the main pros of eTwinning are the implementation, in a creative way, of concrete teaching actions, which can be used with the class group in order to create new learning environments where pupils and teachers can interact in virtual and multicultural spaces. The cons reported converge in the initial difficulties of finding teachers available and in carrying out the project within the limited time of the internship.

However, the farsighted and versatile role of eTwinning is acknowledged. Even before online lessons were implemented because of the COVID emergency, it made use of blended learning, through a constant use of ICT and the use of apps and programs for already consolidated collaborative works. The emergency has, in fact, only changed some details of the projects previously started, as shown in the "BeeLovers" project by student Chiara Felici¹⁸.

All students agree with what emerges from the results of the research "eTwinning and Teacher Training" (eTwinning e la formazione degli insegnanti, Carocci, Roma 2021), that is, they recognize ITE path as a «teaching and training experience [...], positive in terms of professional development and innovation of pedagogical-educational practices» (Fabbro, Ranieri, Imbimbo, 2021, p. 114).

^{16.} https://twinspace.etwinning.net/122610/home.

^{17.} https://twinspace.etwinning.net/122610/pages/page/2110169.

^{18.} Student selected for a contribution in the presentation of the opening session at the 2020 eTwinning European Conference.

REFERENCES

FABBRO F., RANIERI M., IMBIMBO E. (2021), Quadro teorico e risultati dell'analisi di impatto di eTwinning sullo sviluppo professionale dei docenti italiani, in D. Nucci, A. Tosi, M. C. Pettenati (a cura di), eTwinning e la formazione degli insegnanti. Studi, evidenze e prospettive della community italiana, Carocci, Roma, pp. 89-116.

2.11 University of Foggia¹⁹

UNIVERSITY AND COURSE NAME: Università degli Studi di Foggia, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Studi umanistici. Lettere, Beni culturali, Scienze della formazione

YEAR OF JOINING THE INITIATIVE: 2016

CURRICULAR INTEGRATION:

- 2016 compulsory seminar "eTwinning in Initial Teacher Training" as part of the training course for teachers enrolled in the Active Training Internship (TFA) support (6 hours)
- 2017 project with students of the Catholic University of Milan as part of the mandatory seminars of the training course of teachers enrolled in the TFA support (12 hours)
- 2017 project with students from the universities of Salerno, Bologna and Cagliari as part
 of the compulsory teaching of Psychopedagogy of Digital Media of the Degree Course in
 Pedagogical Sciences and Educational Planning (12 hours)
- 2018-19 project with students of the universities of Salerno, Bologna and Cagliari as part
 of the compulsory Computer Science laboratory applied to the teaching of the Degree Courses in Literature and Cultural Heritage, Education and Training Sciences, Cultural Heritage,
 Classical Literature, Modern Literature (36 hours)
- $-\,$ 2020 mandatory laboratories as part of the training course of teachers enrolled in the TFA support (20 hours)
- 2021 mandatory laboratories as part of the training course of teachers enrolled in the TFA support (20 hours)

The University of Foggia welcomed the ITE initiative since its early years, in 2016, as part of the compulsory seminars within the so called Active Training Internship (TFA) aimed at future secondary school teachers, held by ambassador Brigida Clemente. During these seminars, around 200 students received a first information on the eTwinning Community for schools and, subsequently, a more specific training on project planning and management through the portal. The involvement and active participation in ITE projects with other universities allowed the students to live the eTwinning experience

19. By Brigida Clemente, Adjunct Professor, Department of Humanities, Humanities, Cultural, Cultural Heritage, Education Sciences, University of Foggia (brigida.clemente@unifg.it).

as "students" and understand the potential of the project-based learning methodology that is the basis of eTwinning projects, and which distinguishes its training potential. The goal was to develop the necessary skills needed to become themselves promoters of eTwinning's methodology, on the basis of their experiences.

Before the Degree Course in Primary Education was introduced at the University of Foggia in a.y. 2021-22, eTwinning training was also introduced in 2017 to students of the Degree Course in Pedagogical Sciences, within the compulsory teaching of Psychopedagogy of digital media and in Prof. Pierpaolo Limone's educational planning. During a 12 hours laboratory course, around 50 students were involved in an eTwinning project with students of the universities of Salerno, Bologna and Cagliari, thanks to the voluntary intervention of ambassador Brigida Clemente. The introduction of eTwinning ITE project work has had a positive impact on the future teachers' training in terms of innovation of teaching methods, that have been "extraordinarily" extended to the international dimension, offering study opportunities in real learning contexts and, therefore, an improvement of students' outgoing skills certainly from a methodological point of view. In fact, the eTwinning initiative had a direct impact on the training methods of future teachers by innovating their pedagogical and didactic skills in the teaching/learning process. They will be able to experiment with the use of eTwinning projects by integrating them into the school curriculum, applying teaching methods that are certainly more inclusive and innovative thanks to the support of digital technologies in teaching and the use of appropriate methodological tools and strategies.

Considering the positive reaction and reception of students involved in eTwinning activities, in 2018 and 2019 the eTwinning training found its more incisive place in the context of a mandatory 36 hours IT laboratory applied to teaching (attributed to contract to ambassador Brigida Clemente) of the Degree Courses in Arts and Cultural Heritage, Education and Training Sciences, Cultural Heritage, Classical Literature, Modern Literature. The students, around 50, were involved in a project with students from the universities of Salerno, Bologna, Cagliari and Spain with whom they communicated, shared experiences and collaborated in the implementation of project activities through participation in mixed groups. These opportunities for interaction have stimulated the interest and motivation of students due to their natural propensity to socialize and therefore all communication, sharing and collaboration activities have been greatly appreciated. A survey of the degree of student satisfaction and/or a moment of reflection and self-assessment on the path taken and the results of the initiative were carried out within the development of the eTwinning project.

In the last years, 2020 and 2021, the ITE project has been integrated, with a portion of 20 teaching hours, in the compulsory laboratories as part of the training course of teachers enrolled in the *TFA sostegno*, the compulsory training for future special needs teachers, but without the activation of specific ITE projects and purely for informational and theoretical training purposes.

2.12 University of Genoa²⁰

UNIVERSITY AND COURSE NAME: Università di Genova, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze della formazione (DISFOR)

YEAR OF FIRST PARTICIPATION: 2013-14

CURRICULAR INTEGRATION:

- Course year: 4th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): 16 hours compulsory
 ICT Lab
- Formal recognition: 1 credit

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 90 students for 16 hours
- eTwinning ITE project activities stud-to-stud: 50 students
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to previous years: stable
- Project with Private P\u00e4dagogische Hochschule Augustinum "Let's Share New Didactic Strategies for New Generations" (TTI project)

The University of Genoa was among the first ones to join, in 2014, the eTwinning Teacher Training Initiative, today ITE (Initial Teacher Education), and to spread eTwinning among future primary and kindergarten teachers. The coordinator of the Course of Primary Education Science, professor Nicoletta Varani, understood the opportunities of this professional social network in the training of future Italian teachers who are European and world citizens, able to innovate the teaching methodologies of the Italian school. At the beginning eTwinning was introduced in two labs organized by professor Fausta Cacciabue (university tutor) and Armanda Magioncalda, eTwinning ambassador in the Liguria region. Today there are three labs for about one hundred students a year. During the workshops, teachers encourage students to reflect on the skills needed to work in this direction and to keep up with the rapidly changing demands of society.

eTwinning represents an opportunity to share projects and activities with students and teachers from other universities, national and European (internationalization and virtual mobility), to support the action research in the trainees' theses, to motivate the study of foreign languages, needed to communicate with colleagues from other cultures, to disseminate good practices in the institutions where they go to carry out the internship.

The eTwinning training of future teachers has qualifying elements to work on the

20. By Anna Bormida, Adjunct Professor, Department of Education Sciences, Primary Education Science course, University of Genoa (anna.bormida@unige.it); Armanda Magioncalda, Adjunct Professor, Department of Education Sciences, University of Genoa (armanda.magioncalda@edu.unige.it).

basis of skills and build interdisciplinary projects, respecting the methods and times of the online format, learning to be concrete and productive.

eTwinning projects allow students to get to know other distant realities and to see the schools where partners live and work. They have to be responsible for their own work and towards the activities of others, they have to visualize their class and that of their partners as a single class that builds activities together. They can practice collaborative and cooperative teaching methods. The labs are included in the didactic evaluation plan of the Degree Course. Most students appreciate the platform's proposals and the opportunities for continuous professional growth it offers. Students show great interest in the contributions of colleagues from previous years, often by now graduated, who present their experience that has often resulted in a thesis.

2.13 "Kore" University of Enna²¹

UNIVERSITY AND COURSE NAME: Università degli Studi di Enna "Kore", Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Facoltà di Studi classici, linguistici e della formazione

YEAR OF FIRST PARTICIPATION: 2020-21

CURRICULAR INTEGRATION:

- Course year: 3th and 5th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): indirect traineeship (in particular Labs for Mathematics, Diversity/Multiculturalism and English as a foreign language)
- Formal recognition: different credits within the related laboratory

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 640
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to previous years: increasing

Teachers' training is a crucial issue for improving the quality of education. In particular, the initial training education, at university level, of future teachers is strategic for the development of an articulated and multidimensional professional identity, really able to know how to act and compare with one's own community of practices and also with those of other countries.

21. By Marinella Muscarà, Full Professor of Didactics and Special Pedagogy, Dean of the Faculty of Humanities, Linguistics and Education Studies, "Kore" University of Enna (marinella.muscara@unikore.it); Carmelo Salvatore Benfante Picogna, Headmaster, Internship organizing Tutor, "Kore" University of Enna (carmelo.benfantepicogna@unikore.it).

Although the Ministerial Decree 30 December 2010, No. 240 does not provide for direct internship activities at schools abroad, the Faculty of Humanities, Modern Languages and Education of the "Kore" University of Enna has implemented promotional actions addressed to support the international dimension in the professional development process, with the aim of overcoming the paradoxical obstacle generated by current legislation, supporting students' mobility with specific projects.

In the academic year 2020-21, the Faculty of Humanities, Modern Languages and Education had the opportunity to join the eTwinning ITE initiative and participated in the training courses organized by the Regional School Office for Sicily, in collaboration with the network of eTwinning ambassadors; it has included specific eTwinning modules in the training course (internship-laboratories), spreading the project among 4^{th} and 5^{th} year students.

In particular, the modules were placed within the laboratory of didactics of the English language in primary school, the logical-mathematical laboratory and in the one dedicated to diversity, as well as within the direct internship activities. The working students, with a teaching year contract in a primary school, were involved in the drafting of an eTwinning project and the university tutors of the Degree Course took part in the national meeting "eTwinning for Future Teachers" held on 17-18 March 2022 and in the "Partner Finding Fair" where they presented the project "From University to School Round Way". In order to ensure a wider dissemination of the eTwinning initiative among students, it was strategic to create a specific working group, composed of the tutors assigned to the Degree Course in Primary Education, who are entrusted with the activities related to the indirect internship activities and laboratories, coordinated by university professors.

The choice to implement the activities related to the eTwinning initiative within the internship and workshop path is not accidental: the internship and the laboratory are training spaces in which students can experience the fruitful encounter between theory and practice, experience dialogue and exchange different points of view, activating cooperation processes and looking beyond disciplinary boundaries. In short, they are the elective places to learn how to be involved, to acquire awareness of the role and functions assigned to the reflective professional teacher.

In this context, the eTwinning Project adds value to the initial training path of future kindergarten and primary school teachers as it supports the "internationalization at home" in a Degree Course in which – as already pointed out above – the student mobility is limited and at the same time allows to know, compare and reflect on the teaching practices of other educational systems.

2.14 Mediterranean University of Reggio Calabria²²

UNIVERSITY AND COURSE NAME: Università degli Studi Mediterranea di Reggio Calabria, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Giurisprudenza, Economia e Scienze umane (DIGIES)

YEAR OF FIRST PARTICIPATION: 2019-20

CURRICULAR INTEGRATION:

- Course year: 4th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): indirect internship with compulsory attendance.
- Formal recognition: credit recognition attributable to the 7 CFUs of the year NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:
- Training and information activities: 180 students for 26 hours
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to previous years: slightly increasing

eTwinning ITE initiative is a valuable tool for professional development, useful for stimulating not only the multicultural dimension, the culture of inclusion and internationalization processes, but also for sharing the adoption of good practices and the use of innovative teaching methods, for strengthening the concept of digital citizenship of the school through distance collaboration conveyed by the use of technologies, and for improving students' outgoing skills.

The main benefit of participating in the eTwinning project is in the added value at the initial stage of the future teacher's training: in fact, this is innovative teaching that involves the use of ICT, foreign languages, project-based teaching, and learning in a multicultural context. eTwinning offers participating teachers many opportunities – to be part of a network community, to share professional development experiences online, to connect and discuss with other teachers in groups – and it is an important resource for the training of future teachers who are increasingly called upon to learn about and use technologies in daily teaching practice, to support communication and learning in English, to work by projects by actively involving pupils and developing learning paths that foster the development of key competencies, and by joining international collaboration with other institutions.

The Mediterranean University of Reggio Calabria joined the éTwinning ITE initiative in the 2019-20 academic year, including éTwinning modules within the training path of future teachers. Over the years, several surveys have been conducted, through questionnaires, on the degree of student satisfaction with the path

^{22.} By Maria Sammarro, Researcher, Mediterranean University of Reggio Calabria (maria.sammarro@unirc.it).

taken and the results of the initiative; in particular, 62% of students believe that the training meetings with eTwinning ambassadors have been very useful for their professional growth. Definitely, what aroused the most interest was the possibility of entering into twinning with other countries as well as the different potentials of the eTwinning platform. For 64% of the students surveyed, the promotion of laboratory and experiential teaching is among the top motivations for a teacher to use the eTwinning platform in the school setting, as is the desire to innovate teaching (62%).

2.15 University of Molise²³

UNIVERSITY AND COURSE NAME: Università degli Studi del Molise, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze umanistiche, sociali e della formazione (SUSEF)

YEAR OF FIRST PARTICIPATION: 2020

CURRICULAR INTEGRATION:

- Course year: 3rd and 4th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): English Lab (6 hours project activities)
- Formal recognition: none

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 50 students for 6 hours
- eTwinning ITE project activities stud-to-stud: 50 students for 6 hours
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to previous years: strong growth

The eTwinning ITE initiative, launched at the University of Molise in the academic year 2020-21 to promote and enhance the initial training of teachers according to the principles of the new European framework of competences, is based on the Degree Course in Primary Education.

The design and implementation of curricula based also on digital innovation are now considered to be the pillars of teacher training in digital teaching, as they represent a fundamental measure for the creation of innovative learning environments foreseen for the school of the future.

eTwinning ITE offered our students the opportunity to experience the use of new technologies using foreign language communication in a multicultural and cooperative learning context. At the same time, it allowed the Degree program to approach a

23. By Florindo Palladino, Tutor Coordinator, University of Molise (florindo.palladino@unimol. it); Carmela Pietrangelo, Professor, University of Molise (carmela.pietrangelo@unimol.it).

new model of internationalization, strengthening cooperation with other European universities on the topics of educational and digital innovation.

Initially it was proposed as a training moment within the indirect internship courses for about 200 students (a.y. 2020-21). After the final monitoring, our university considered it appropriate to start, in the following academic year, a new path within the English language laboratories. It allowed small groups of students to work together with the "experiential modelling approach". It also consisted in offering our students the opportunity to personally participate in the student-to-student project and to experiment with tools and processes that they will be able to use in the future in their classrooms.

Students were very happy to take part to the initiative and participated actively to the proposed project activities.

The European collaboration was particularly appreciated, and it led to different personal initiatives to be experimented during the next academic years.

It motivated our students so much that we are considering to propose this initiative as didactic experimentation during the direct internship in the primary classrooms at school.

2.16 University of Padua²⁴

UNIVERSITY AND COURSE NAME: Università degli Studi di Padova, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Filosofia, sociologia, pedagogia e psicologia applicata (FISP-PA)

YEAR OF FIRST PARTICIPATION: 2017-18

CURRICULAR INTEGRATION:

- Course year: 2nd (3 hours), 3rd and 4th (12 hours workshops)
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): Methodologies, Didactics and Technologies for Teaching (compulsory 3 hours general intro for 150 2nd year students), 12 hours hands-on Lab on voluntary basis for students in 3rd and 4th year within the indirect internship
- Formal recognition: none

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 200 students for 18 hours
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school
- Trend compared to previous years: increasing

24. By Marina De Rossi, Full Professor, Department of Philosophy, Sociology, Pedagogy and Applied Psychology, University of Padua (marina.derossi@unipd.it).

Since its introduction in the Master's Degree in Primary Teacher Education (LM-85bis) at the University of Padua, eTwinning has gained a growing interest from pre-service teachers, thanks to its ability to develop TPCK (Technological Pedagogical Content Knowledge; cf. Mishra, Koehler, 2006) competencies in an integrated way. This is clear from the number of students that asked to take part in the 12-hour workshop, that has doubled in participants since its first introduction to the course. In the TPCK framework, effective teachers need to combine Technological, Pedagogical and Content Knowledge and eTwinning gives a chance to do so in an interdisciplinary way. In fact, both the general seminar of introduction and the workshop are carried out by eTwinning ambassadors who teach different subjects in school of all grades, letting the teacher's students appreciate the adaptability of the platform to different teaching purposes and settings. After each seminar and workshop, teacher students were asked to answer a questionnaire.

Building on the expertise gained during the workshop, where pre-service teachers are asked to develop their own eTwinning project, several students have asked to carry out their thesis dissertation on eTwinning. So far, three dissertation theses on eTwinning have been prepared and discussed at the University of Padua: all have been carried out through action research in schools of the region, with undergraduate students observing the development of TPCK competences in teachers and academic and soft skills in pupils thanks to their use of eTwinning.

A PhD thesis on eTwinning is currently being researched, where the PhD candidate is observing the development of children in a Grade 1 primary class using iPads to connect to a twin class in Sweden through eTwinning.

All this research was made possible by the cooperation with the School Regional Authority, working as a hub to connect eTwinning schools and teacher students: a collaboration that will certainly be continued in the future.

REFERENCES

MISHRA P., KOEHLER M. J. (2006), Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge, in "Teachers College Record", 108, 6, pp. 1017-54.

2.17 University of Palermo²⁵

UNIVERSITY AND COURSE NAME: Università degli Studi di Palermo, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze psicologiche, pedagogiche, dell'esercizio fisico e della formazione

25. By Elif Gulbay, Research Fellow (RTD-B), University of Palermo (elif.gulbay@unipa.it).

YEAR OF FIRST PARTICIPATION: 2013-14

CURRICULAR INTEGRATION:

- Course year: all course years (from 1st to 5th)
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): mandatory attendance for all following workshops and indirect traineeship:
- 1st year, "Educational Technologies for Primary and Pre-Primary Education" course, including a compulsory workshop
 - 2nd year, "Workshop: Educational Technologies for Primary and Pre-Primary Education"
 - 3rd, 4th and 5th year, indirect traineeship
 - 5th year, "Workshop: English Language Teaching"
- Formal recognition: credits, formal integration in the Syllabus

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities:
 - 1st year: 300 students for 6 hours lessons and 8 hours workshop
 - 2nd year: 280 students for 24 hours workshop
 - 3rd, 4th and 5th year: 800 students for 12 hours (4 hours each year) indirect traineeship
 - 5th year: 260 students for 32 hours
- eTwinning ITE project activities stud-to-stud: 3 students
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to previous years: increasing
- Links: "Qualified Teacher of the Future" project (https://twinspace.etwinning.net/205508/home) with Mersin University (Türkiye), Balıkesir University (Türkiye), University of Picardy Jules Verne (France) and Stuttgart University (Germany); "What Kind of World Do We Want?" project (https://twinspace.etwinning.net/192010/home) with Mersin University (Türkiye) and Balıkesir University (Türkiye)

Introducing eTwinning into the Initial Teacher Education programs has an essential role in the training of student teachers as it contributes to prospective teachers' and teacher trainers' academic/professional and personal development while enhancing their pedagogical and learning/teaching skills. Moreover, it offers various advantages to the teacher training institutions as it helps increase the capacity to trigger changes in terms of modernization and international opening within the educational organizations; broader understanding of practices, policies and systems in education (Nucci, Tosi, Pettenati, 2021; Boffo, Manicni, Bellandi, 2018; La Marca, Gulbay, 2021). eTwinning in Initial Teacher Education offers the possibility for real-world application of XXI century skills such as creativity, critical thinking, collaboration and communication while simultaneously providing tomorrow's teachers with the engagement in national and international projects.

University of Palermo's involvement in the éTwinning ITE initiative has clearly helped remodel and improve initial teacher training methods by activating research-action-training processes and disseminating the sharing of good practices among participating teacher trainers and future teachers.

A major part of the student teachers who have been involved in eTwinning projects reports that it has helped them improve ICT skills, enable intercultural exchange, increase motivation and group participation, enhance language skills, improve pair/team cooperation and communication. While preparing the activities during the student-to-student projects, the pre-service teachers stated that they have benefited from various types of Web 2.0 tools (preparing presentations, animation, evaluation, organizing online meetings, digital stories, cartoons, video editing etc.).

Teacher training institutes need to enable prospective teachers to meet the varied needs and expectations of students and families while at the same time creating sustainable classroom communities. The collaborative online learning opportunities that the eTwinning ITE action offers to tomorrow's teachers and to their institutes would no doubt lead to new perspectives regarding teachers' cultural understanding and professional identity. This internationalization of teacher training aims to create globally aware and culturally sensitive educators and students.

REFERENCES

BOFFO V., MANCINI F., BELLANDI M. (2018), eTwinning Traineeship: An Internationalization Model for the Study Course in Primary Education, in "Form@re. Open Journal per la formazione in rete", 18, 1, pp. 279-89.

LA MARCA A., GULBAY E. (2021), Enhancing Innovative Pedagogical Practices in Initial Teacher Education: eTwinning, in "Nuova secondaria", 7, pp. 3-12.

NUCCI D., TOSI A., PETTENATI M. C. (a cura di) (2021), eTwinning e la formazione degli insegnanti. Studi, evidenze e prospettive della community italiana, Carocci, Roma.

2.18 University of Perugia²⁶

UNIVERSITY AND COURSE NAME: Università degli Studi di Perugia, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Filosofia, Scienze sociali, umane e della formazione

YEAR OF FIRST PARTICIPATION: 2018

CURRICULAR INTEGRATION:

- Course year: 2nd, 3rd, 4th and 5th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): didactic of the English language (around 50 students on voluntary base); laboratory with ambassador in traineeship course (around 562 students, 2nd, 3rd, 4th and 5th year)
- Formal recognition: information not available
 NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:
- Training and information activities: not available

26. By Genziana Bellini, Lecturer in Philosophy and Human Sciences, seconded as a Tutor, University of Perugia (genziana.bellini@unipg.it).

- Recurrence of indirect and direct internship hours not taken during the current year: all the students
- eTwinning ITE project activities stud-to-stud: information not available
- No. students that carried out a "normal" eTwinning project during their traineeship at school: around 50
- Trend compared to previous years: information not available

The University of Perugia's Bachelor of Science in Primary Education joined the initiative "eTwinning for Future Teachers – Initial Teachers Education (ITE)" in 2018. Annalisa Morganti, coordinator of the course in Primary Education, strongly wanted the Degree program to initiate an active training that would see students involved in internationalization activities with internship projects abroad and the use of English-language technologies. The characteristics of the experimental model that has started in recent years in the Umbrian university, thanks also to the collaboration between the School Regional Office for Umbria and the department of reference, involves the indirect and direct apprenticeship, within which eTwinning has been hinged, to represent a path of international and intercultural preparation for the initial training of teachers.

Particular attention is paid to the acquisition of linguistic and digital skills in English language teaching in the final year of the course, where a major aspect is devoted to eTwinning training. As part of the teaching of English Language Didactics, planned for the 5th year of the course (on average around 120 students each year), a significant space is dedicated to meta-reflection on the design of teaching activities, a pivotal function of the role of the future teacher; in these courses, structured in laboratory form, students, organized in small groups, experiment with the design and evaluation of learning paths (UDA) using the microteaching technique. Starting from 2018, the eTwinning ITE initiative was included in the English language course, focusing on eTwinning's project planning and the quality criteria:

- Methodological innovation;
- Disciplinary and curricular integration;
- Communication and educational exchange between partner and European schools/universities;
- Use of functional technologies (distance learning);
- Results and documentation.

With the students of the 3rd, 4th and 5th year, eTwinning was used to strengthen the acquisition of language and digital skills and encourage pedagogical innovation and curricular internationalization. A series of 4 hours webinars were organized in collaboration with eTwinning ambassadors to illustrate the platform, familiarize with eTwinning and present some meaningful tools.

The university has also participated to ITE projects, in particular with the Catholic University of Milan.

Since 2019, some students have chosen to talk about their eTwinning experience

in their final theses. Those studies show how "learning" with eTwinning is not just an individual process but that the social dimension of "learning" plays a significant role; there are many forms of interaction and collaboration that can be introduced, from mutual aid to cooperative learning and peer learning, both within the classroom and through the formation of working groups with pupils from different classes, or different nationalities.

This is why it is highly meaningful for students first and teachers then, to immerse themselves into an eTwinning project, a tool to create innovative partnerships, to exchange knowledge and experiences, to encourage comparison of teaching methods, the cultural, linguistic, professional and human enrichment of participants, but also the awareness that we live in a united, multilingual and multicultural Europe. Starting from the pandemic, the entire local community and the future teachers experienced how spending digital and multicultural skills is a resource that has changed the connotations of traditional teaching: opening to exchange, collaboration, planning among different cultures. In a historical and cultural context in which technologies have reduced distances, in which the valorisation of "multilingual competence" has become a fixed point, the eTwinning platform metaphorically assumes the role of a "bridge", a thread that unites so many people with different traditions, cultures, languages but with a great desire to get to know each other, to broaden their perspectives and horizons, to experience diversity not as an obstacle, but a richness.

2.19 Roma Tre University²⁷

UNIVERSITY AND COURSE NAME: Università degli Studi Roma Tre, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze della formazione

YEAR OF FIRST PARTICIPATION: 2019

CURRICULAR INTEGRATION:

- Course year: 5th year
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): English language and translation (5th year, optional), 5th year English language laboratory (mandatory), replicated 3 times per year (1 module per each Lab channel)
- Formal recognition: the eTwinning module is a mandatory part of the 5th year Lab; the activities performed within the eTwinning projects concur to obtaining 2 CFU at the end of the Lab.

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 20 hours for 350 students repeated in 3 modules (Canali)
- 27. By Raffaella Leproni, Full-Time Researcher and Adjunct Professor, Dep.t of Education, Roma Tre University (raffaella.leproni@uniroma3.it); Silvia Sperti, Full-Time Researcher and Adjunct Professor, Department of Languages, Roma Tre University (silvia.sperti@uniroma3.it).

- eTwinning ITE project activities stud-to-stud: all 350 students of the Lab have joined the award-winning eTwinning project "HOTW Hands of the World. Can You SEE What We SAY?" (https://twinspace.etwinning.net/94991/pages/page/741925). Activities have been developed in peer-to-peer/stud-to-stud modality, as well as in teaching/mentoring modality (university students working with primary school students), though they did not count as internship
- No. students that carried out a "normal" eTwinning project during their traineeship at school: 350 students
- Trend compared to previous years: strong growth
- Links: https://twinspace.etwinning.net/94991/home

eTwinning allows to network and delve into a variety of topics, to facilitate language learning processes in both students and teachers and to provide them with transdisciplinary support of a different nature by supporting and encouraging their strategic competences, in a lifelong learning perspective. It promotes access to a community of practice and learning that develops on the territory and beyond, in the perspective of the Third Mission; it facilitates internationalisation and mobility, including virtual mobility. In addition, the University as organisation learns to positively manage resources and to promote inclusion, interculturalism, partnership and above all the three dimensions of learning: lifelong, lifewide and lifedeep learning. In this sense, the issue of digital and distance learning also benefits.

The eTwinning initiative contributes to innovating the methods and processes of initial teacher training; all Primary Education students involved experience collaborative learning on transversal and significant aspects with a strong operational value in a safe (tested and protected), immersive yet flexible and organised environment.

The framework of pedagogical and didactic competences that guides the training of future teachers enrolled in Primary Education Course in Italy is represented by the Ministerial Decree 249/2010 and by the outgoing profile of the primary cycle teacher it outlines. This profile is divided into three dimensions: basic methodological-didactic knowledge, fundamental disciplinary knowledge, and inclusion. The various teachings decline and develop their own specific knowledge and learning objectives taking into account these parameters, but also what the legislation makes available (e.g. the National Indications for the Curriculum in their various reissues) and what has been outlined internationally in recent years (Bologna Process, UNESCO and European Community key competences). The action-research activity of the future teacher on his/her eTwinning experience acts on the "meta" dimension: as it takes place, participants acquire skills but also reflect on what they are doing (metacognitive perspective: self-regulation of learning, recursive reflexivity, planning and problem solving from a collaborative perspective, which is the basis of doing research).

Of course, since it is a platform that exploits the Net and thus the online, new technologies play a major role, fostering confrontation with a digital paradigm that determines a rethinking of the way in which knowledge is organised and constructed, and therefore the way in which one learns and teaches.

eTwinning is grafted into the 5th year English language laboratory, where each channel of the laboratory hosts targeted meetings introduced by the teacher and project contact person for the Department, Prof. Leproni, and led by eTwinning ambassadors who involve students in the use of the platform. The project and training activities normally include: training activities for university trainers, teaching activities within the laboratory, student-to-student project activities, project activity during the placement in "normal" projects, possible involvement of host tutors. Recognition for students is quantified in terms of tasks that contribute to the Lab's suitability (enabling the teaching of English in primary school). From a.y. 2022-23 the introductory meetings will be brought forward to the 4th year of the Primary Education course as part of the work placement in order to give a broader range of students (i.e. not only those graduating in the English language discipline) the opportunity to also use it for their 5th year work placement project.

The university has successfully involved in the process other institutions such as the Regional School Office for the region Lazio, the network of schools affiliated to the Department and others, through protocols but also dissemination initiatives that have met with a great response, in particular from school heads. For example, two training meetings for headmasters were organised at Roma Tre with the collaboration of INDIRE (Erasmus+) and USR (*Ufficio scolastico regionale*, Regional School Office) Lazio.

Monitoring and evaluation of the activities performed play a pivotal role to understand and assess the skills needed and required of the (L2) teacher. To date, two self/self-assessment questionnaires are already being used in the English language Lab; the development of a specific questionnaire related to the eTwinning experience is also in the pipeline. In the meantime, the students' comments in the HOTW project sections and in the Lab forum on the dedicated platform (form online) provide strong positive feedback both with respect to the proposed activities and to the eTwinning device in general²⁸.

So far, eTwinning has provided many benefits for the academic training system of future teachers: a positive spin-off is certainly that of joining a network of communities of practice that enable them to acquire and deepen transversal skills useful not only for language teaching but also for issues that affect any subject area, while also experimenting with pro-social skills. The proposal has a positive impact on the school too, also stimulating educational innovation.

It is of interest to the university to encourage internal lecturers from all subject areas to join a network and develop additional teaching skills and transversal knowledge useful for research and teaching itself. eTwinning has also proved to boost partnership in international projects, for example those related to Erasmus+, and to implement mobility at all levels. For example, eTwinning training and courses have been successfully included in an on-going KA220 action: DILECTINGS project (DIgital Literature Educational Competences for Teachers: Intercultural iNclusive Good-practices for Second-language learning)²⁹.

eTwinning helps to promote pedagogical and didactic competences; the most

^{28.} https://sway.office.com/2CphPnpgCJSu9qjt. 29. https://dilectings.uniroma3.it/.

important thing that this initiative can do (and on which it pivots) is to introduce a culture of knowledge that is co-constructed beyond disciplinary specialisations and entrenchments. In other words, the current challenge of the world of knowledge is to take on a perspective that is not only inter but also trans-disciplinary by overcoming the fences between hard and soft disciplines, between didactic knowledge and disciplinary know-how and so on. Teacher training is to be rethought by moving away from the vertical (top-down), application-oriented logic aimed at building a toolbox, while instead acting horizontally (community of practice, self-training, knowledge co-building agentivity), aiming at reflexivity and decision-making. eTwinning has also been implemented in the Department of Foreign Languages, Literatures and Cultures.

The idea of including eTwinning in teacher training contexts stems from the need to fill a gap. The eTwinning modules have not been included in the initial training of teachers or in university courses except for Degrees in Primary Educational Sciences where eTwinning has been introduced for several years. The initiative to include eTwinning modules in courses such as TFA (one year training and traineeship for future special needs teachers), PAS (one year training and traineeship for future secondary school teachers who are currently already working temporary as teachers), CLIL and in-service training courses, e.g. within Erasmus projects, has been a way to enrich and complete the training programs offered in those contexts. The inclusion of eTwinning modules in TFA and PAS training courses and in CLIL training has proved to be an effective and successful initiative, consistent with the learning objectives of these courses, as demonstrated by the positive results obtained, also in terms of students' and trainees' satisfaction and appreciation. The initiative has been later extended to the Department Bachelor's and Master's Degrees in Languages, Linguistic and Cultural Mediation (L-12) and in Modern Languages for International Communication (LM-38), as well as to courses for future secondary school teachers with the aim to:

- promote the diffusion of the sociocultural values represented by eTwinning;
- develop innovative teaching, methodological and pedagogical skills and practices;
- encourage the training and professional development of future teachers.

2.20 University of Salerno³⁰

UNIVERSITY AND COURSE NAME: Università degli Studi di Salerno, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria DEPARTMENT OF REFERENCE: Dipartimento di Scienze umane, filosofiche e della formazione (DISUFF)

30. By Mariagrazia De Meo, Researcher in English Language and Linguistics, University of Salerno (mgdemeo@unisa.it); Iolanda Sara Iannotta, Researcher in Experimental Pedagogy, University of Salerno (iiannotta@unisa.it).

YEAR OF FIRST PARTICIPATION: 2017 CURRICULAR INTEGRATION:

- Course year: 2nd, 3rd, 4th and 5th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): Year 2 and 3 indirect internship; Year 4 Educational Technologies Lab; Year 5 English Lab
- Formal recognition: at present, eTwinning is still not formally recognised as an official part of the curriculum, although this is at the centre of an ongoing discussion.

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 180 students for 2 hours; 200 students for 3 hours
- eTwinning ITE project activities stud-to-stud: 4 students
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to previous years: slight decrease
- eTwinning ITE project "Culture in the ELT Classroom" in collaboration with the University of Santiago de Compostela (Spain) and Düzce University (Türkiye). The project was addressed in particular to 5th year students, within the laboratory of English language teaching.

In 2017, Prof. Rosanna Tammaro, who was, at the time, Head of the Degree Course in Primary Education, decided to include "eTwinning – Teacher Training Initiative (TTI)" in the course, starting with the training of "Future Teacher Educators" (*Tutor* and *Tutor coordinatori*) working at the Dipartimento di Scienze Umane, Filosofiche e della Formazione (DISUFF). Since then, there has been a growing awareness of the professional development that eTwinning can bring into the training of future primary teachers, as it fosters a direct and practical opportunity to put theoretical knowledge and competences into practice.

The training of future teachers is a complex and multifaceted process involving, on one hand, the policy makers and, on the other, looking for effective strategies to develop qualified professionals for schools. eTwinning is a community of practice that enables its members to share interests and goals and develop new perspectives. Among the most direct advantages, according to our experience, there is the focus on cooperation and teamwork, with clear identification of individual tasks and responsibilities (Cacciamani, 2008). Through the development of different eTwinning projects, the future pre-primary and primary school teacher has the opportunity to experience new communicative strategies and innovative teaching methodologies, testing their efficacy and effectiveness. Another important aspect is the chance of putting into practice one's own English communicative competence in professional contexts, whether face to face or online. Planning eTwinning projects enhances awareness of teaching practices, with a specific focus on the interactive nature of learning processes. Despite these significant advantages of including eTwinning ITE projects in the 5 years Degree Course of Primary Education, there are still some difficulties in motivating student participation, generally due to fear of adding new commitments in what is already a very challenging course. However, those students who have taken part in eTwinning projects have provided a very positive feedback with a high level of enthusiasm for

an experience that they have described as one of the most effective and motivating in their career. They will certainly provide essential support in the dissemination of good eTwinning practices among their peers.

REFERENCES

CACCIAMANI S. (2008), Imparare cooperando. Dal Cooperative Learning alle comunità di ricerca, Carocci, Roma.

2.21 University of Turin³¹

UNIVERSITY AND COURSE NAME: Università di Torino, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Filosofia e Scienze dell'educazione

YEAR OF FIRST PARTICIPATION: 2016

CURRICULAR INTEGRATION:

- Course year: from the 3rd to the 5th
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): indirect traineeship, mandatory
- Formal recognition: 1 credit for the attendance of the indirect traineeship Lab; 1 credit for project activities during direct traineeship

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 55 students for 25 hours
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school: 5 students
- Trend compared to previous years: growth

The University of Turin has introduced eTwinning in its Degree Course in Primary Education Science in 2016. The ITE initiative gives future teachers the opportunity to experience different European education systems, to use foreign languages and to practice digital skills that the students have learned during their studies and to formulate playful, innovative and effective methodological proposals.

In their final reports, students who took part in the eTwinning projects course highlighted the importance of this educational experience, which was essential for real professional growth. It is cross-curricular and multidisciplinary, developing European key skills included in civic education and providing students with key evaluation skills as the recent reform in Italy requested.

31. By Emanuela Boffa Ballaran, Coordinator Tutor, University of Turin (ballaran 64@gmail.com); Bruna Ramella Pralungo, Coordinator Tutor, University of Turin (brunaramellapralungo@gmail.com).

Students in 5th year have become familiar with the eTwinning platform. They were invited to an eTwinning Group, where they could explore the platform, working alone and in small groups and using new tools necessary to work collaboratively with European partners.

Furthermore, during the internship lessons, students had the opportunity to watch some videos that showed real experience in the classroom. They understood that children improved their use of the English language, while the real-life situations increased their motivation and promoted an active participation of the pupils. In addition, the interns understood the importance of detailed and exhaustive documentation that allows teachers and pupils to assess themselves.

During the 2021-22 academic year, a student composed a thesis with the following title: *eTwinning: una risorsa per lo sviluppo professionale pre e post Pandemia nella regione Piemonte*³². It is clear, from the analysis of the surveys, that the eTwinning teachers were a valuable help during the distance learning thanks to the technological and organizational skills acquired during the European projects.

2.22 University of Verona³³

UNIVERSITY AND COURSE NAME: Università di Verona, Corso di laurea magistrale a ciclo unico in Scienze della formazione primaria

DEPARTMENT OF REFERENCE: Scienze umane YEAR OF FIRST PARTICIPATION: 2017-18

CURRICULAR INTEGRATION:

- Course year: 1st and 2nd
- Subject/Lab/Course/Traineeship (compulsory/on voluntary base): English Lab
- Formal recognition: credits

NUMBER OF STUDENTS AND HOURS FOR A.Y. 2021-22:

- Training and information activities: 200 students for 28 hours:
 - 1st year 100 students for 4 hours
 - 2nd year 100 students for a total of 24 hours (2 groups, 12 hours each)
- eTwinning ITE project activities stud-to-stud: none
- No. students that carried out a "normal" eTwinning project during their traineeship at school: none
- Trend compared to previous years: growth
- 32. eTwinning: A Resource for Professional Development Pre and Postpandemic in the Piedmont Region, by Fiorella Raffio, Supervisor Bruschi Barbara, co-rapporteurs Rodolfo Galati and Boffa Ballaran Emanuela.
- 33. By Paola Vettorel, Assistant Professor of English Language and Linguistics, University of Verona (paola.vettorel@univr.it); Alessandra Lovato, Secondary School Teacher of English Language/Adjunct Professor, University of Verona (alessandra.lovato@univr.it).

During the academic year 2021-22 all the first year students (about 100) were involved in the seminar that introduced them to the eTwinning community and platform. The seminar was part of the *Laboratorio di Lingua Inglese per la professionalità docente 1*, and was realised in cooperation with the Regional School Office for the Region Veneto. The students carried out activities aimed at familiarizing them with the portal and the materials, focusing on some "good practices" and working in small groups on the first steps to set up an eTwinning project. The second year students (about 100) took part in a specific *Laboratorio eTwinning* (12 lessons = 1 CFU), which was held in English, and carried out activities within the community; they simulated an eTwinning project working in small groups on its different steps and realised an individual digital Padlet portfolio in English. The *Laboratorio* was compulsory for both the first and the second year.

eTwinning Initial Teacher Education initiatives have been considered a fundamental element in the English language laboratories of the Combined Bachelor's and Master's Degree in Primary Teacher Education (Laboratori di Lingua Inglese – Corso di laurea magistrale di Scienze della formazione primaria), and have been aimed at providing innovative tools for prospective teachers, not least from a cross-disciplinary point of view. The many innovative aspects comprise and actively integrate different competencies – linguistic, methodological, digital as well as collaborative –, offering new professional perspectives both for students and for teacher educators. All eTwinning educational initiatives have been positively met by the students, who actively participated in the activities, realizing professional and valuable products, including the final reflections in the Padlet individual portfolio. Students also evaluated the activities proposed in the seminars, selecting the ones they deemed most interesting: they particularly appreciated the simulated project in small groups, and its oral presentation in English. In this activity student teachers worked cooperatively focusing on the different steps of an eTwinning project and could hence actively experience how several competencies are at work.

Throughout the academic year the eTwinning coordinator participated to partner finding fairs and started ideating and drafting an eTwinning ITE project in collaboration with the University of Cagliari to implement student-to-student activities.

As to the Department of Foreign Language and Literatures, an eTwinning seminar has been introduced since a.y. 2018-19 as integral part of the *Laboratorio tirocini di introduzione alle tecnologie e metodologie didattiche* for students attending the Department Bachelor's and Master's Degree Courses (Battisti *et al.*, forthcoming). The Teaching Lab, an elective course, has been aimed at familiarizing students with the teaching profession as to foreign languages (French, German, English and Spanish). In a.y. 2021-22 a total of 17 students attended the lessons, confirming the positive trend of the previous years. The eTwinning seminar, realized in cooperation with the USR Veneto, represents an introductory moment to innovative tools for Foreign Language teachers. From a.y. 2022-23 attendance to the Teaching Lab will be compulsory, and we aim at further extending the eTwinning seminar activities.

REFERENCES

BATTISTI C. et al. (forthcoming), An Innovative Education Experience for Future Foreign Language Teachers: The Laboratori e Tirocini di Introduzione alle Metodologie e Tecnologie Didattiche/Teaching Labs, in "Iperstoria".

Exploring the features, benefits and challenges of the eTwinning ITE. A multiple case study in five Italian universities

by Ilaria Ancillotti, Francesco Fabbro, Elena Gabbi and Maria Ranieri*

3.1 Introduction

Over the past 10 years, the eTwinning program has slowly but gradually entered university classrooms. Initially promoted to encourage the exchange and circulation of good practices among European schools, with positive implications for teachers' professional development (Nucci, Tosi, Pettenati, 2021; Fabbro, Ranieri, Imbimbo, 2021), since 2012 eTwinning also belongs to the experience of Italian universities, mainly involving students of Primary Teacher Education, through the Initial Teacher Education (ITE) initiative. Some studies have been already carried out to monitor the implementation of ITE in the educational and social policies of European countries (ET2020 Working Group on Schools Policy, 2015). Nevertheless, still little is known about the impact of this experience on the school and university system. The study presented in this chapter is the first research on the dissemination and implementation of ITE in higher education in Italy. Based on a scientific partnership between the Department of Education, Languages, Interculture, Literatures and Psychology of the University of Florence, and the Italian eTwinning Agency, it aims to identify practices and organisational models adopted in the various Italian universities, as well as the benefits and barriers that enabled or prevented the integration of eTwinning in initial teacher training.

The conceptual framework of the current study comes from the integration of the methodological model used in a previous research aimed at assessing the impact of the eTwinning programme on in-service teachers (Nucci *et al.*, 2021; Fabbro, Ra-

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nieri, Imbimbo, 2021) and from the literature on initial teacher training addressing future teachers (ET2020 Working Group on Schools Policy, 2015). The reference framework is structured into three related research topics concerning the impact of eTwinning on: a) organisational approaches for managing initial teacher education in universities, focusing on the development of the academic system of future teacher education, specifically the establishment and maintenance of strategic partnerships for initial teacher education, as well as the monitoring and evaluation of teacher education practices; b) methods and techniques for training future teachers, concerning with the innovation of training practices, particularly the use of digital technologies, the collaboration between stakeholders and the possible integration of action research activities into the training pathway; c) future teachers' pedagogical and didactic competences, related to the consolidation and development of the ability to design teaching activities, learning scenarios and pathways, to use various teaching techniques, to promote and support learning and inclusion of all learners – also through the use of digital technologies – and to evaluate learning processes and outcomes, including learner engagement.

Given this background, we will first present the research design of the study, including the research questions and the methods adopted. We then illustrate and discuss the results of the study with a double focus: the first one concerns the mapping of the different Italian experiences that have characterised the collaboration between the universities and the eTwinning Italian Agency; the second one refers to a multiple case study, involving various stakeholders, to identify opportunities, limitations and possible developments of the ITE initiative. The chapter concludes with final remarks on the achievements of the programme and future steps.

3.2 Research methodology

An empirical study was designed to identify the existing models of ITE integration in the Italian higher education system, as well as to understand how key stakeholders make sense of their ITE experience in relation to the innovation of the training methods addressing future teachers and to the development of pedagogical competences.

From this perspective, the research aimed to provide a snapshot of the ITE in the Italian academia and an evaluation of its impact in terms of organisational learning and teachers' education.

An online questionnaire was administered in the a.y. 2019-20 through Lime Survey in order to map the organisational practices and models in use at the 21 Italian universities wherein ITE was present. The Heads of the Degree Course in Primary Education – or alternatively the university tutors – filled in the online questionnaire. It included 20 questions regarding the number of students and tutors involved in the ITE initiative, the specific eTwinning activities integrated into the ordinary educa-

tional path in the a.y. 2019-20 and possible benefits and challenges associated to the university's participation in the ITE initiative.

In addition, semi-structured interviews (Cohen, Manion, Morrison, 2018) with relevant stakeholders from five universities were conducted via Webex to explore more in-depth and from a multiple perspective the organisational, teaching and learning processes entailed in the eTwinning ITE experience. This qualitative investigation was carried out within the framework of a multiple case study (Yin, 2014) through which benefits, criticalities and possible improvements of the ITE initiative were systematically detected and compared. Five universities were selected for the multiple case study, namely the University of Florence, the Catholic University of Milan, the University of Salerno, the Roma Tre University and the University of Padua. At least four stakeholders for each institution were interviewed, specifically the Head (or Coordinator) of the Degree Course in Primary Education, a professor (or alternatively a university tutor) involved in the eTwinning activities, a university student participating in the ITE programme and a school tutor supervising student teachers' implementation of eTwinning activities in the classroom. Overall, 21 video-interviews lasting about one hour and forty minutes each were collected.

The closed answers of the questionnaire were statistically analysed on a descriptive level with the support of the software IBM SPSS Statistics 27, whilst a qualitative content analysis (Mayring, 2014) of the interviews' transcripts was carried out with the support of the software QCAmap (Mayring, 2019).

Features and characteristics of joining the ITE initiative by Italian universities

The mapping of existing ITE activities was accomplished by the distribution of an *ad hoc* questionnaire, to define membership practices at the 21 Italian universities participating in eTwinning in the a.y. 2019-20. The primary goals of this mapping are to reconstruct an overall picture of the various configurations resulting from the collaboration between eTwinning and the Italian universities involved, and to describe the representative models of these configurations, identifying the predominant characteristics and operational practices in use.

3.3.1. OVERALL DESCRIPTION OF THE PARTICIPATION IN ETWINNING BY THE UNIVERSITIES

The ITE initiative has been implemented in Italy since its start, and the results reveal continuous growth: one-third of the institutions (7) have been collaborating for more than three years, 9 for one to three years, and 5 for less than one year. The composition of ITE recipients also demonstrates a significant convergence, with Primary Education

| TABLE 3.1 Amount of people involved in the a.y. 2019-20 | | | | | |
|---|-------|--------|--------|------|------|
| ITE participants | Sum | M | S.D. | Min. | Max. |
| Students informed about the eTwinning initiative | 3,661 | 174.33 | 122.07 | 0 | 450 |
| Students actively participating in the design and/or implementation of an eTwinning project | 1,227 | 58.43 | 81.51 | 0 | 253 |
| University tutors involved in the ITE initiative | 58 | 2.76 | 3.45 | 0 | 15 |

students represented in 19 of 21 universities. Students of Foreign Languages and Literature and special needs teachers were also trained.

Concerning the involvement of university students and tutors (TAB. 3.1), more than 3,500 students received information about the eTwinning system, its tools and its potential for their own training as future teachers. Of these, one-third (33.2%) also actively participated through simulations within teaching activities or actual field applications, gaining experience with the development and eventual implementation of eTwinning projects in their own learning path.

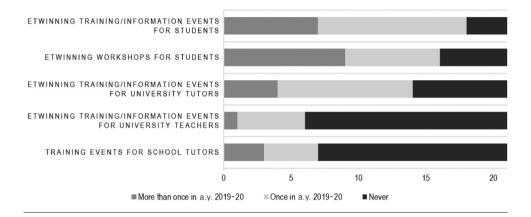
A total of 58 university tutors are available to support the training process of future teachers, with a ratio of one tutor for every 63 university students informed. However, the aggregated results also show considerable internal variability, which highlights the diversity between higher education institutions.

Another topic explored is the concrete decisions for integration of eTwinning into education, such as training time, subject area and reward for participation. In terms of duration, short interventions ranging from 1 to 4 hours are used to train students at 8 universities. For 5 universities, the time commitment necessary ranges from 5 to 15 hours, during which time future teachers can be gradually introduced to the opportunities and resources available. Finally, 8 universities commit more than 16 hours each week to educating students, frequently using laboratory-based teaching methods to maximise the contribution of eTwinning within structured experience activities.

In terms of the non-exclusive topic areas in which this training took place, the results suggest that the most commonly shared choice is to incorporate ITE within the indirect traineeship (10 universities), thereby increasing the experience as a professionalising lever in a reflective perspective. The international nature of eTwinning also enables its incorporation into English courses and/or the Content and Language Integrated Learning (CLIL) methodology (7 universities).

In 6 universities, the choice is to include éTwinning in pedagogical-didactic instruction, which can make use of the eTwinning system environments' design and collaboration tools. In contrast, training is embedded into computer laboratories and ICT courses at 5 institutions, emphasising ITE's contribution to digital skills and the use of educational technology. Through the implementation of eTwinning projects, including the potential of testing school-based activities, the ITE initiative supports national and international relationships with other institutions. In fact, participating





in a collaborative project is one of the direct traineeship activities for future student teachers in 8 out of a total of 21 universities.

In terms of student recognition, the most common approach is the delivery of certificates of participation for activities completed (9 universities). Other incentives include the exemption of a portion of the hours required to complete a university course (6 universities) and the accreditation of university credits (5 universities). Participation in ITE can earn undergraduates extra points for their final thesis in 2 universities.

The following section of the questionnaire explored the different types of activities carried out within the academic teaching offer. Overall, the attention paid to the dissemination and information on the ITE initiative for the different targets is widespread, especially with regard to the actions in favour of students and university tutors. FIG. 3.1 in the horizontal axis shows the frequency of the activities organised by the 21 universities in relation to the academic year considered. 4 universities dedicated some type of intervention to all types of stakeholders.

Students' activities provide a clearer view of the application dimension of integrating ITE into university education. In fact, there are 14 universities where students participated in projects that are at the heart of eTwinning activities: international projects were carried out most frequently between students only, without class participation (6 universities), followed to the same extent (4 universities) by projects between Italian universities for students only and international projects with classroom application. In 8 universities, the activity in the projects is carried out within the direct placement pathway, although this modality is not the only one that can be implemented. Moreover, eTwinning represents a fertile thematic area for the realisation of thesis projects, conducted in 10 universities, testifying to the students' interest in continuing experimental paths started and framing the experience in a broader theoretical and critical-reflective

framework. It should be noted, however, that in more than a third of the universities involved in the ITE initiative no active involvement of future teachers was recorded.

Finally, the last section of the questionnaire concerns the self-assessment of the ITE integration model, carried out by the faculty member respondent in each university. First, the reaction of university students to the ITE initiative was investigated through the respondents' perceptions in relation to participation in training events and project design and/or implementation activities. The Likert scale indicated the students' reaction (from I = very negative to 5 = very positive) for both aspects; the option "No opinion" was also included and the cases in which this category was selected were excluded from the statistical processing.

Although this type of indirect evaluation cannot be considered exhaustive regarding the measurement of students' real perceptions, the impression is that of a good reception of the initiative for both the educational dimension (n = 19; M = 4.58; S.D. = 0.61) and the application dimension (n = 16; M = 4.56; S.D. = 0.62). Overall, there is a frequently perceived reaction in favour of integrating eTwinning into university courses for both aspects.

Secondly, the benefits and criticalities derived from the university's adherence to the ITE initiative were explored. The development of students' teaching skills ranks first among the benefits (14 universities out of 21). Wide acceptance is also received by the benefits related to the internationalisation of the study pathway (13) and the innovation and broadening of training methods (12). The creation of strategic partnerships (8) and the development of students' digital skills (6) are further elements that find moderate agreement among the various universities. Furthermore, the integration of action research in the training of future teachers (5) and the promotion of their multilingualism (4) were also mentioned.

Overall, fewer criticalities were mentioned than benefits. Time constraints were identified as a crucial issue in 9 institutions as a key component in matching universities' needs with the learning processes that can be developed through eTwinning. Additional barriers include students' prior English communication skills (7), difficulties in finding partners abroad (4), English communication skills of internal staff (3) and bureaucratic constraints (3). The difficulties in recruiting partners in Italy, as well as the lack of institutional support, are also key factors for 2 of the 21 universities. Other challenges include the peculiarities of individual contexts, such as staff digital competencies, a poor collaborative culture, and difficulties carrying out synchronous events due to the project partners' different timetables.

3.3.2. THREE MODELS OF ITE INTEGRATION IN THE ITALIAN HIGHER EDUCATION SYSTEM

The general picture that emerges regarding the integration of ITE in Italian institutions, as seen in the data presented in aggregate form, is heterogeneous and may be traced back to a large panorama of potential combinations of objectives and imple-

| TABLE 3.2 | | |
|---|---|---------------------------------|
| ITE integration models | in Italian universities | |
| Integration of ITE into the university educational plan | Inclusion criteria | Descriptive data of the cluster |
| Informative model $(n = 5)$ | The students didn't participate in either the design or implementation of a project | , , , , , |
| Applicative model $(n = 6)$ | The students participated in the design and/or implementation of a project | * * * |
| Collaborative model $(n = 10)$ | ternship activities and/or projects | |

mented activities. To identify and define the various forms that ITE integration can take in higher education systems, the items in the questionnaire about students' use of eTwinning were utilised as identification criteria for describing the models emerging from the overall framework. The three models, to which the organisational and didactic configuration of ITE in the university setting is related, were then defined using a data-driven approach: informative, applicative and collaborative (TAB. 3.2).

In the *informative model*, the students got to know eTwinning, but were not involved in the planning and direct participation. In one university, training is aimed only at tutors and university teachers. The training is mostly brief and the typical recognition is a certificate of participation in the event in 3 out of 5 cases. Adherence to this information model could concern the choice of keeping the use of eTwinning detailed in the academic year under review, also in relation to the critical issues described above, such as the difficulty of synchronizing the timing between university activities and eTwinning projects (indicated by 4 out of 5 subjects) and administrative burdens. However, the model could also represent a preliminary phase in which to carry out fundamental operations and anticipate possible evolutions of integration into the system, particularly in favour of the internationalisation of study trajectories (3 out of 5).

The second model is distinguished by an *applicative* approach to the tasks performed by future teachers. This modality incorporates a larger number of students: on average, 42.7% of students actively participate in classroom design workshops or

projects, both internationally and nationally. The duration of the students' training in this model varies considerably, encompassing various mixes of simulated sessions and participation in more intense training activities. The perceived benefits are related to course internationalisation (5 out of 6), training method innovation, and the improvement of future professionals' teaching skills. As a result of the increased involvement of students, the largest criticality observed is not of an organisational type, but rather in the users' communication skills (4 out of 6).

The third model shifts the emphasis to meaningful learning in context and consists of the *collaborative* approach used by the universities and local institutions, particularly the education system. In fact, future teachers participated in direct internship activities, which favoured the trial of teaching strategies and the situated use of eTwinning tools. This opportunity was used on average by 36% of students with large variations amongst universities. The model is also characterized by the dissertation activities carried out in the same period. To get to the involvement of the school system it was necessary on average a longer time to join ITE and also the commitment required of students in terms of training hours is more intense. The most significant advantage is the improvement of students' teaching abilities (8 out of 10). Universities face technical-operational challenges such as time restrictions, staff communication skills and the search for institutional partners (3 out of 10). The collaborative model offers the most elaborate and complex manner of incorporating ITE into the university educational offer, soliciting situated learning of the teaching methods and techniques performed in the school classes by future teachers.

The three models – informative, applicative and collaborative – have a progressive dimension, also reflecting the autonomy of adhesion through the two modalities provided by eTwinning, a first training phase and an optional second phase of participation in projects. For this reason, the adherence to a model by a university is inevitably not stable over time. Indeed, it has been shown that programme permanency can support more intense types of collaboration, most likely because it permits the universities involved to confront and resolve the critical issues identified. In addition, it is interesting to note that the largest group of universities has already integrated ITE within the direct internship and allows the development of projects involving local schools. However, it remains challenging to coordinate operations with the different organisations involved and to provide the same possibilities in all contexts. In fact, even in the presence of a model built for integration into the local area, not all students are able to participate in a whole eTwinning experience with the school classes.

3.4 Results of the multiple case study in five Italian universities

The results of the multiple case study were divided into three dimensions, each concerning a specific aspect of the analysis: *a*) university's organisation and management

of eTwinning training; b) teaching/learning processes and methods emerged from eTwinning training; c) pedagogical skills and teaching practices developed by eTwinning's student teachers.

For the analysis, we used an inductive method for the first and second dimensions and presented the topics in terms of benefits and criticalities. Instead, we chose a deductive method for the last dimension, exploring four main aspects of pedagogical and didactic competences.

3.4.I. ORGANISATION AND MANAGEMENT OF ETWINNING TRAINING

The benefits reported by the interviewees regarding this dimension of ITE initiative mainly concerned collaboration with personalities and entities outside the academic context. FIG. 3.2 illustrates, for each benefit analysed, the number of mentions for universities and the total frequency of mentions received.

The most distinctive element of ITE's integration in university's course is an increased collaboration between Italian and foreign universities. Through the initiative, collaboration between universities leads both to an increase in the prestige of the course of study and an increase in students' linguistic, cultural and teaching skills.

4 out of 5 universities emphasised an increased collaboration with their Regional School Office (*Ufficio scolastico regionale*, USR). In some cases, it was the USR that recommended universities to include the eTwinning initiative in the curriculum of future teacher's training. Sometimes, they also helped universities in the planning and implementation of teaching activities.

The ITE initiative also enabled a strengthening of relations between schools and universities, because eTwinning could be the link between the academic reality and the school context.

A further valuable element highlighted by the interviewees was an increased collaboration between Italian universities. National collaborations are often realised between courses of study of different universities; in this twinning, future teachers work with colleagues from other Italian regions or towns.

3 universities mentioned the internationalisation of research as a benefit of including ITE in the future teachers' training. Some university lecturers underline the fact that they have carried out research activities with European colleagues they met thanks to the eTwinning project collaborations. This fruitful exchange also benefits universities themselves, which, by expanding their collaborative network in the international academic community, also increase their exposure.

Although no systematic and comprehensive evaluation of the eTwinning programme seems to be present in any of the universities, different types of monitoring for reporting purposes or learning/competence assessment were found in some academic contexts. Some monitoring and/or evaluation is partial as it is inherent to their own context and specific areas of interest. There are those who keep track of ITE's internal programming by means of a compendium of what was actually done

| FIGURE 3.2 | |
|------------------------------|----------------------------------|
| Organisational and managemen | t benefits of eTwinning training |

| Benefits | Università Cattolica del Sacro Cuore di Milano | Università degli Studi di Firenze | Università degli Studi di Padova | Università degli Studi di Roma Tre | Università degli Studi di Salerno | Total frequency |
|--|---|---|--|--|---|--------------------|
| Collaboration between Italian and foreign universities | 6 | 4 | 0 | 3 | 2 | 15 |
| Collaboration with regional school office | 0 | 3 | 5 | 5 | 2 | 15 |
| Strengthening of relations between schools and universities | 2 | 0 | 5 | 4 | 3 | 14 |
| Collaboration between Italian universities | 2 | 2 | 0 | 1 | 2 | 7 |
| Internationalisation of research | 1 | 3 | 0 | 0 | 2 | 6 |
| Internal monitoring and evaluation of eTwinning implementation | 1 | 1 | 1 | 2 | 0 | 5 |

and the participation obtained during the year; those who specifically monitor the training process of the students who carry out the internship in the field, by means of evaluation questionnaires on the subjects involved in the experience, but also on the acquisition of specific skills; or those who choose a widespread and formative type of evaluation, declined in performance indicators within their own discipline and/or laboratory.

The critical aspects of the ITE initiative detected on the organisational and management level were specific by the context. In particular, the criticalities that emerged were: the difficulty in synchronising projects between university partners, the limitation of academic research due to eTwinning data protection, the lack of support from the USR in eTwinning's training, the turnover and lack of university tutors that lead eTwinning initiative to be discontinuous, the lack of systematic monitoring of eTwinning in schools, the lack of time to introduce themselves at "partner finding" events, the difficulties in twinning with other Italian and/or foreign partners, the non-involvement of university tutors in eTwinning training of future teachers and the limited time of accreditation on the eTwinning platform for university students.

3.4.2. TEACHING/LEARNING PROCESSES AND METHODS OF ETWINNING

Many benefits were detected in the dimension of teaching/learning processes and methods. As in FIG. 3.2, FIG. 3.3 illustrates, for each benefit investigated, the number of mentions per type of stakeholder and the total frequency of mentions received by the total number of respondents.

Respondents highlighted primarily the development of digital and/or teaching competences of future teachers. With eTwinning, the teacher's technological and teaching competences are implemented and updated through daily use of the online platform and exchange with other teachers. Consequent to eTwinning training is also the opportunity for the student to activate an action-research and training process, meant as a knowledge of the methods and tools through which a project is implemented, as well as mutual growth and enrichment through the exchange between peer colleagues and in-service teachers, and also in-depth reflection on their work which often

| Benefits | Heads of the Degree Course (n=5) | Professors/ University tutors (n=6) | School tutors (n=5) | Future teachers (n=5) | Proportion over total respondents (N=21) |
|--|--|---|------------------------|--------------------------|---|
| Digital and/or teaching competences of future teachers | 4 | 6 | 5 | 4 | 19 |
| Activation of a process of action-research and training | 3 | 4 | 3 | 4 | 14 |
| Sharing of best practices between teachers | 2 | 5 | 3 | 3 | 13 |
| Development of future teachers' collaboration skills | 3 | 5 | 3 | 2 | 13 |
| Situated learning of English language by future teachers | 3 | 4 | 3 | 1 | 11 |
| Internationalisation of the future teachers' learning experience | 2 | 4 | 2 | 3 | 11 |
| Transnational sharing of a project design model | 3 | 1 | 3 | 2 | 9 |
| Knowledge of other educational and school systems | 1 | 3 | 2 | 3 | 9 |
| Application of Project Based Learning in teaching practice | 0 | 2 | 1 | 4 | 7 |
| Innovation of in-service teachers' teaching through eTwinning internship | 1 | 1 | 4 | 1 | 7 |
| Application of a competence-oriented training model | 2 | 1 | 2 | 1 | 6 |
| Digital competences of university tutors/teachers | 0 | 2 | 0 | 0 | 2 |

FIGURE 3.3 Benefits of teaching/learning processes and methods of eTwinning

becomes the final thesis. Another benefit highlighted concerns the sharing of best practices between teachers. For in-service teachers and, above all, for future teachers, the comparison of experiences and projects carried out leads to professional growth. In addition, the TwinSpace can host a mutual aid community: teachers emphasised this aspect, especially in reference to the lockdown period and distance learning for the COVID-19 pandemic.

The eTwinning training also fosters the development of future teachers' collaboration skill. The TwinSpace, a place where one can meet different cultures, ages and professional backgrounds, allows its users to develop skills in team collaboration, co-design, but also effective communication in distance learning and/or web conferencing situations.

Another benefit reported by stakeholders concerns the learning of "real" English language by future teachers: the intention to communicate and collaborate with foreign partners is an incentive to learn the foreign language in a real and informal context.

The exchange with foreign realities also allows an internationalisation of the future teachers' learning experience, as well as a transnational sharing of a design model. Each eTwinning project is developed from a pre-defined, flexible and basic model that is common to all participants; once the project is created, interested schools can apply and activate collaboration. Additionally, the twinning with other schools or universities necessarily leads to knowledge of other educational and school systems, another quality element reported by the interviewees.

An added value that eTwinning offers to the training of future teachers concerns the application of Project Based Learning (PBL) in teaching practice and a competence-oriented training model. With eTwinning, teaching is learner-centred and project-based; the teacher is not bound to the traditional programme, because he has to look above the competences that the learner needs to achieve. Another element

considered advantageous is the innovation of in-service teachers' teaching through eTwinning internship: students with ITE training may have complementary skills to those of the teacher, in terms of methodological, technical and linguistic skills.

Finally, few respondents mentioned as a benefit of ITE the development of digital competences of university tutors/teachers.

Only two critical issues emerged at the level of teaching/learning methods and processes: low knowledge of eTwinning by in-service teachers and low use of digital technologies at school.

3.4.3. PEDAGOGICAL SKILLS AND TEACHING PRACTICES

The last area of investigation concerns pedagogical and didactic competences, meant as the set of knowledge and skills needed to act effectively in: a) learning design; b) teaching practices; c) facilitation of learning processes and outcomes; d) assessment.

The first area of competence explored, *learning design*, takes into account three specific sub-areas. Concerning the ability to (co-)design PBL paths, the interviews often revealed a tendency to collegial planning both during the indirect internship, through peer workshop activities, and during the direct internship in the school. Such opportunities allow the development of collaboration skills, design flexibility, sharing, as well as the creation of international projects. Furthermore, eTwinning's shared design format would seem to have fostered the acquisition of a detailed, smart and flexible learning design methodology. Teaching and learning design in eTwinning also make it possible to design teaching paths consistent with the school curriculum and the classroom's need: eTwinning's project can be easily adapted to the classroom context and the school curriculum thanks to its flexibility. Finally, designing in eTwinning means, for the interviewees, defining authentic tasks. This is expressed in designing favouring the logic of competences, but also in the choice of topics close to the children's experience and in the use of new technologies.

Another macro action examined concerns *teaching practices*, referring to three sub-areas. In their day-to-day work with eTwinning, stakeholders claim to have diversified and increased their teaching methods by school practice in an international context. They also develop a reflexive posture with respect to other teaching methods.

The ITE initiative encourages in-service teachers to engage in continuous training, and the future teacher to be inspired by teaching experiences of a large community of teachers. From a methodological point of view, the eTwinning experience can enhance skills like documentation and digital storytelling, which are increasingly useful strategies for teachers' work. Finally, eTwinning platform makes it possible to create original educational paths by connecting disciplines, projects and cultures.

Stakeholders also highlighted the successful and reflective use of digital technologies for teaching. Teachers and trainees reported experiences where technology and foreign language were effectively integrated into traditional teaching. This type of

integration has led to innovations in teaching, making it more multimedia and interactive through the use of applications, platforms and other digital resources.

The last teaching practice examined concerns teaching in both physical and virtual classrooms. The use of the classroom platform and the connection with project partners led to the development of specific classroom management, communication and teaching strategies in blended or distance contexts. In the interviews, it often emerged that eTwinners felt better prepared than their colleagues for distance learning, which was imposed without warning in many schools around the world due to the impact of the COVID-19 pandemic.

The third macro action investigated was *facilitation of learning processes and out-comes*, considering six specific sub-areas. The eTwinning initiative, through the integrated use of technology and English, provides access to learning resources for all students, including those with Special Educational Needs (SEN). Specifically, digital education increases the possibilities for inclusion in daily school activities for pupils with disabilities and learning disorders; at the same time, English language allows students to speak the same – foreign – language, eliminating the gap between Italian students and the other with different cultural and linguistic backgrounds.

eTwinning projects also promotes pupils' ability to understand, analyse and create media products through the assiduous use of digital resources and tools. Pupils involved in eTwinning projects are encouraged to develop transversal competences such as collaboration, citizenship, intercultural, digital and self-regulation skills.

The use of digital technologies can support pupils' self-directed learning as they support all pupils finding their own learning space and promote autonomous work.

Technologies can also meet pupils' different learning and/or relational needs, because it is possible to make a lesson more appealing or intuitive through videoconferencing or through the use of applications/software; but also to support teachers in responding to certain situations of students' needs. With eTwinning, pupils' educational background is recognised and valued and teachers are more likely to create empathic relationships with them. This has facilitated the establishment of a positive social-relational climate in many classes.

Finally, the last macro-category examined was assessment. Six indicators were specifically analysed. Evaluation in eTwinning promotes self and peer evaluation in both pupils and future teachers. In some university contexts, attention is paid to evaluation practice already from the training course; the use of the platform itself can make teachers critically reflect on their own work, thanks to the interaction with other teachers. The possibility of promoting self-evaluation skills in classroom work with students was also highlighted.

The teachers interviewed reported eTwinning projects in which they have used authentic assessment tools to detect pupils' deeper knowledge, which can be transferred to real contexts, to also improve teaching design. Another assessment indicator investigated concerns the ability to assess transversal skills emerged in work's groups. It was mainly university teachers/tutors who illustrated the relationship between

eTwinning and the assessment of transversal competences, i.e., those competences that are not strictly disciplinary. For example, in the English language laboratory of some universities, evaluation of students' progress in learning English focuses on their exchanges with colleagues and foreign partners.

Two other indicators analysed concerned the use of digital technologies for giving and receiving timely and targeted feedback and for formative and summative assessment. eTwinning platform can facilitate the exchange of opinions and sharing of operational guidance by teachers/tutors in the training of future teachers; in parallel, future teachers learn new tools for evaluating classrooms from the exchange with other eTwinners. Many online applications, such as Kahoot, have proven to be effective for both summative and formative assessment. One of the students interviewed even noted better results when administering the online test with multimedia elements, compared to the written test she had previously taken.

3.5 Final remarks and conclusions

This chapter presented the results of a study aimed at exploring the different ways the éTwinning ITE initiative has been integrated within 21 Italian universities since 2012 onward and to evaluate its impact on student teacher education. From the mapping of the programme, it emerged that collaborative approaches were prevalent in the various contexts with an integration of ITE in the training of future teachers in the local school system. This approach was followed by an application model, including didactic simulations and design activities, and then by a purely informative approach to the platform, through training introductory sessions addressed to the students. Overall, around 3,500 students were informed about ITE during the academic year 2019-20 and about one third of them were able to actively participate in the design and/or implementation of an eTwinning project. In particular, international projects were carried out more frequently among prospective teachers only, without involving the classes. Finally, student teachers' perception of the ITE initiative was very positive in all universities.

Moving on to the multiple case study, several interesting results were found. In particular, as regards the organizational and management dimension, the greatest benefit of joining ITE concerns the extension of the collaborative network in the national and international academic community, as well as in the school system. In addition to strengthening their networks of relationships, another aspect of innovation is the presence of the international dimension of research within the Degree Course, which is not associated to the study experience abroad but which is inherent in the online sharing of eTwinning projects at international level. The most significant problems were, however, the difficulty of synchronizing projects between university partners and the limitation of academic research, due to the protection of eTwinning data. Finally, with regard to possible improvements, the stakeholders shared the need for

an extension of the eTwinning initiative to more courses and/or to all those enrolled in the Primary Teacher Education programme. Further proposals concern greater information/training on the eTwinning initiative and on the network of eTwinners schools for in-service teachers, tutors and university teachers, to encourage national and international partnerships and more easily activate projects between eTwinning schools and universities.

When considering the innovation of future teacher training, increased digital and/ or didactic skills have been acknowledged thanks to the use of the platform, which enables users to exchange their knowledge and experiences with their colleagues. Indeed, the sharing of good practices among teachers, through the TwinSpace, represents a further improvement introduced by eTwinning. Through the numerous opportunities offered for the professional and cultural exchange, future teachers improve their collaborative skills that are essential for teaching in the first cycle of education. The connection between physically and culturally distant realities also contributed to the learning of the English language in a situated way, leading to the internationalization of student teachers training. On the other hand, a criticality found in the various contexts was the lack of knowledge of eTwinning by in-service teachers.

In terms of pedagogical and didactic skills' development, the participation in the ITE initiative favoured the ability to know how to co-design Project Based Learning scenarios, and to diversify and expand teaching methods, also in relation to educational technologies. As far as the evaluation is concerned, the stakeholders declared that eTwinning leads to confronting different evaluation strategies and choosing the most appropriate method to the teaching context. The use of eTwinning in the classroom also facilitated the learning processes since, thanks to the support of technologies, appropriate space for action and learning was found for each child, responding to every special educational need.

To conclude, we can only underline the significant penetration capacity of the ITE initiative, which has managed to open its way to the university, an institution which is characterised by several constraints due to the need to make the organizational structure solid and manageable. Yet, eTwinning has not only managed to break through in the university context, but has also generated improvements that suggest important developments for future teachers in our country.

References

COHEN L., MANION L., MORRISON K. (2018), *Research Methods in Education*, Routledge, London-New York (8th ed.).

ET2020 WORKING GROUP ON SCHOOLS POLICY (2015), Shaping Career-long Perspectives on Teaching: A Guide on Policies to Improve Initial Teacher Education, Publication Office of the European Union, Luxembourg, https://www.schooleducationgateway.eu/downloads/files/Shaping%20career-long%20perspectives%20on%20teaching.pdf.

- FABBRO F., RANIERI M., IMBIMBO E. (2021), Quadro teorico e risultati dell'analisi di impatto di eTwinning sullo sviluppo professionale dei docenti italiani, in Nucci, Tosi, Pettenati (2021), pp. 89-116.
- MAYRING P. (2014), Qualitative Content Analysis: Theoretical Foundation, Basic Procedures and Software Solution, Klagenfurt am Wörthersee (https://www.ssoar.info/ssoar/handle/document/39517).
- ID. (2019), *Qualitative Content Analysis: Demarcation, Varieties, Developments*, in "Forum Qualitative Sozialforschung Forum: Qualitative Sozial Research", 20, 3 (https://www.qualitative-research.net/index.php/fqs/article/view/3343).
- NUCCI D., TOSI A., PETTENATI M. C. (a cura di) (2021), eTwinning e la formazione degli insegnanti. Studi, evidenze e prospettive della community italiana, Carocci, Roma.
- NUCCI D. et al. (2021), Sviluppo professionale e processi di innovazione: una ricerca sulla comunità eTwinning, in M. C. Pettenati (a cura di), Paese formazione. Sguardo d'insieme e viste particolari da esperienze nazionali di formazione degli insegnanti, Carocci, Roma, pp. 240-61.
- YIN R. K. (2014), *Case Study Research: Design and Methods*, SAGE, Los Angeles-London-New Delhi-Singapore-Washington DC (5th ed.).

Part Two eTwinning for Future Teachers in Europe



eTwinning and Initial Teacher Education (ITE) in Europe

by Anne Gilleran and Rute Baptista*

4.1 Introduction

Initial Teacher Education is the first, crucial step in a journey of a teacher's professional life. By shaping future teachers' knowledge, skills, and mindsets, it lays the foundations for their capacity to lead and facilitate successful student learning.

Having as a starting point that teaching needs to be considered as a continuum of lifelong learning, to consolidate, further develop, and share best practices, then the best moment is to start with ITE, during the early stages of the profession, continuing into and throughout career development. Designing and implementing this continuum requires new approaches to support collaborative learning environments for teachers that are essential for cooperation.

Since 2005, eTwinning offers, among other services, a professional social network for teachers in over 40 countries, which has been gradually transformed into an innovative European community of teachers. This community would not be complete without the presence of the student teachers and those that prepare them for their future. Having this in mind, the eTwinning for Future Teachers initiative started in the academic year 2012-13 as a European pilot project to include eTwinning in Initial Teacher Education.

4.2 Origin and development

Over the past 10 years this area in eTwinning has grown considerably from a small pilot, with five countries – UK, NO, DK, BE (NL), IT – and seven institutions involved,

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1. ET2020 Working Group on Schools Policy, Shaping Career-long Perspectives on Teaching: A Guide on Policies to Improve Initial Teacher Education, Publication Office of the European Union, Luxembourg 2015 (https://www.schooleducationgateway.eu/downloads/files/Shaping%20career-long%20perspectives%200n%20teaching.pdf).

to a general action involving all countries participating in eTwinning. The general involvement of all countries started in 2018 with some challenges and many opportunities. The challenges went from the diversity of realities in ITE across Europe to the engagement of teams in each institution. Nonetheless the opportunities overcame the challenges and from 2019, student teachers (whether in placement or not) were offered the opportunity to register on the platform and join the eTwinning community.

The initiative has a growing number of examples from different countries, demonstrating the NSO and ITE educators' belief that introducing eTwinning into the training of student teachers delivers significant value to them and their institutions. It offers a practical application of XXI century skills, provides collaborative project and international experience, and is aligned to the priority of digital citizenship.

The European Council conclusions of 20 May 2014² state some very important principles and needs addressed by the eTwinning for Future Teachers' initiative:

- «Teacher educators have a crucial role to play in maintaining and improving
 the quality of the teaching workforce. The provision of high quality initial teacher education [...] is a significant factor in ensuring that [...] teachers possess and maintain the relevant competences»;
- «Teacher education programmes [...] should be sufficiently flexible to respond to changes in teaching and learning. They should draw on teachers' own experience and seek to foster cross-disciplinary and collaborative approaches»;
- «Initial teacher education should provide prospective teachers with the core competences [...], as well as stimulate the motivation» and «encourage both self-reflection and collaborative working, adaptation to multicultural classrooms and acceptance of leadership roles».

eTwinning facilitates the exchange of teachers' practices, as well as the implementation of remote collaborative projects for their students in order for both teachers and students to improve their language and digital skills. The activities at the heart of eTwinning have also been rising in importance regarding teachers' professional development.

In 2022 all over Europe more than 150 institutions, 250 teacher educators and 10,000 student teachers took actively part in eTwinning benefitting from its many contributions to initial teacher education. The inclusion of eTwinning in Initial Teacher Education provides:

- I. the *opportunity* to foster project-based teaching and learning and inter/multidisciplinary work and to develop linguistic and digital competences;
- 2. the perfect *environment* for European openness and internationalisation, that promotes intercultural competence;
- 3. the *context* for the development of professional skills, such as project management, setting goals, planning, teamwork, as well as the reflection on professional practice through the exchanges with teachers from other education systems.
 - 2. Document 52014XG0614(05), Council conclusions of 20 May 2014 on effective teacher education.

FIGURE 4.1
Participation in eTwinning for Future Teachers from 2018 to 2022

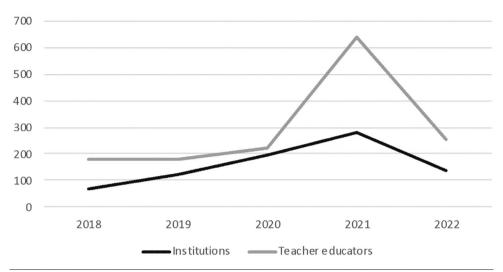
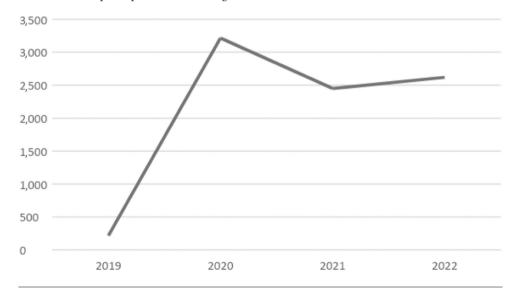


FIGURE 4.2 Student teachers participation in eTwinning for Future Teachers from 2019 to 2022



In FIGG. 4.1-4.2 may be seen the concrete growth and engagement of institutions and teacher educators since 2018, when the action was open to all eTwinning participating countries (FIG. 4.1), as well as the growth and engagement of student teachers (FIG. 4.2) since the platform was open for them in 2019.

In line with the Council conclusions³ on the European Universities initiative, eTwinning for future teachers provides the opportunity, environment and context to «Keep fostering the establishment of excellent, flexible, diverse, generally geographically balanced and sustainable models of alliances, linked to local and regional ecosystems, encouraging education, research, innovation and creativity, and the development of good practices for cooperation that can be inspiring role models to other higher education institutions, aiming at seamless balanced mobility of students, mobility of teachers, staff and brain circulation, as well as open recruitment and more attractive career and working conditions for researchers and staff» (39).

4.3 Involving ITE institutions in eTwinning

The institutions that wish to be involved are guided and supported in every aspect. Educational and technical support, together with assistance in linking with ITE and their students from other countries, is provided by the eTwinning National Support Organisations (NSO). The NSO staff, as well as the eTwinning ambassadors (experienced teachers in eTwinning projects), discuss proposed activities to support the training of trainers and trainee students. To increase this support in 2021 a network of ITE ambassadors was established, who cooperate with all the different actors to support the development of the action.

The initial engagement process involves a presentation of the initiative by the NSO and a follow up discussion about eTwinning with the ITE institution. The relationship expectations are managed by an informal Memorandum of Understanding (MoU) agreed with NSO. The advantage of having an MoU is that it identifies the remit, the boundaries and the opportunities of the collaboration between the ITE institutions and eTwinning and at the same time allows to manage expectations form both parties.

Each NSO adapts the level of engagement and support for the initiative to meet the local needs. In eTwinning there is a set of core principles that every eTwinner and their events, messages, posts, projects' materials and everything published on the eTwinning area must adhere to, and comply with, in line with the European Union's fundamental values and general principles⁴. Thus, the code of conduct is compulsory for all, including all institutions part of the eTwinning for Future Teachers.

Once the terms of cooperation are agreed a registration from a teacher educator is needed on the European School Education Platform and here the journey starts.

^{3.} Document 52021XG0610(02), Council conclusions on the European Universities initiative – Bridging higher education, research, innovation and society: Paving the way for a new dimension in European higher education 2021/C 221/03.

^{4.} https://ec.europa.eu/component-library/eu/about/eu-values/.

4.4 Participation of ITE institutions in eTwinning

The ITE institution participation in eTwinning can be done in many forms, making it flexible and adaptable to any reality.

The first form of ITE institution participation is Observation. This is a good way to get started with planning. In this stage the NSO may discuss and agree with the institution the participation in eTwinning and local support model with ITE. Examples: eTwinning ambassador support, local/regional/national meetings, local professional development, helpdesk (email), local resources and information.

The second form is the Introduction of student teachers to eTwinning. In order to introduce eTwinning in ITE, there are two main activities that can be applied:

- I. Activity one is the inclusion of an "Introduction to eTwinning" in the ITE curriculum to their students. In a simple way an introduction of eTwinning to student teachers, supported by NSO or eTwinning ambassador as agreed, gives the basis for the growing understanding of eTwinning, and can lead to the student participation in a first short activity;
- 2. Activity two is the creation of small eTwinning collaborative projects among teacher educators and/or among student teachers. These projects can be between teacher educators, student teachers only (at local, national, international level), or small eTwinning projects with pupils, when student teachers are in placements in schools. Projects can be set up between teacher educators and student teachers.

The participation in eTwinning goes beyond the project and partnership opportunities. There is also the space for participating in professional development opportunities, local and central events (online and face to face), NSO-led workshops and support, central online seminars, and annual conference.

While the NSO supports ITE at local and national level, the Central Support Service (CSS) coordinates the action at central level by:

- moderating two Featured Groups: one dedicated to teacher educators and one dedicated to student teachers and moderated with the support of the ITE ambassadors;
- organising the ITE Annual Conference that aims at networking, sharing practice, and growing.

These groups are an important part of the life of the eTwinning for Future Teachers as it is specifically aimed at teacher trainers working for ITE institutions. The Featured Group provides information on how to participate, the different models of introducing eTwinning in their work, examples of ITE activities, showcase presentations from the face-to-face workshops, and partner finding forum. Moreover, a set of regular activities are promoted to foster the networking and cooperation.

Like within eTwinning itself, it is not compulsory to do an eTwinning project. ITE institutions can do Activity one and Activity two at the same time. It is up to the ITE institution, in consultation with the NSO, how quickly they want to introduce the initiative. The ITE institutions can only set up an eTwinning project with another ITE.

Once the ITE-ITE project is set up, teachers from an eTwinning school may be invited to participate as members.

4.5 Rewarding and awarding ITE institutions

A lot of work has been put into place throughout the last 10 years of eTwinning for Future Teachers and in 2022 it was decided to acknowledge the work of the institutions, teacher educators and student teachers involved at national and European level. The ITE Institutions Awarding Framework was launched and consists of three areas titled Curriculum integration, Project implementation and Research outputs. Each area includes three criteria.

- 1. Curriculum integration: this area includes any action that the ITE institution has taken to share and inform about its commitment to include or integrate eTwinning in the curriculum and to support and strengthen other teachers and the student teachers' competences through the eTwinning tools.
- 2. *Project implementation*: this area includes the involvement of teacher educators and student teachers in eTwinning project process.
- 3. Research outputs: this area includes any eTwinning-related research activity that the ITE institutions have been engaged with in the following indicative disciplines: Curriculum Integration, Information Communication Technologies, Pedagogy and Didactics, Innovation, Initial Teacher Education, Professional Development, Initial Vocational Education and Training, Early Childhood Education and Care. While acknowledging research and scientific production, the area lays emphasis on the notion of collaboration at local/institutional, national, and international level.

Several institutions across Europe applied for this award to see their work acknowledged both at European and national level.

4.6 Benefits of the involvement of student teachers in eTwinning

The communication *School development and excellent teaching for a great start in life* from the European Commission to the European Parliament, the European Council, the European Economic and Social Committee and the Committee of the Regions (Document 52017DC0248) suggests that:

- «The quality of teacher education requires more attention. Initial Teacher Education is most effective when pedagogical theory is combined with both subject knowledge and sufficient classroom practice» (3.2);
- «Student teachers need to be prepared for collaborative work and career-long professional development, for dealing with diversity in the classrooms and for using digital technologies with confidence» (3.2);

- «High-performing teachers collaborate. Teaching as a team, observation of other teachers, and wider professional learning communities are gaining ground as powerful forms of peer collaboration but are not yet the norm across Europe» (3.2);
- «To improve pupils' learning experience, teachers need to be able and willing to work and learn in teams – with other teachers, in multi-professional school teams and with external partners» (3.2).

eTwinning for Future Teachers seems to meet the indications mentioned above.

Educators from the ITE institutes report, in a survey carried out in 2019⁵, that the inclusion of eTwinning within the ITE curriculum is of enormous benefit. ITE educators consider «eTwinning as an important initiative that opens the minds of their trainees and helps student teachers collaborate with other European colleagues and improves skills for their future careers». Furthermore, they state that «eTwinning is an excellent and practical way of integrating digital technologies in teaching and learning; promoted as an emerging pedagogy based on collaborative and networked learning; promoted as a pedagogy for nurturing XXI century skills, collaboration, team skills, oral, written and digitally mediated communication, self-directed learning, creativity, multidisciplinarity, multilingualism digital literacy etc».

The University of Eastern Finland (UEF), where eTwinning is a functional part of the studies of student teachers, is an excellent example of how all this works in practice. In 2021, UEF, the university's Tulliportti Teacher Education School, and the Finnish National Agency for Education (EDUFI) planned and produced a series of videos explaining how eTwinning can be used in teacher education. «At UEF, teacher students have the opportunity to learn about eTwinning during both the teacher education modules in the university department and the supervised teaching practice periods», says professor Ritva Kantelinen from UEF. «First, we learn about it, familiarise ourselves with it, and practise developing ideas. Then we go on to the teaching practice period and carry out actual projects in the eTwinning network»⁶.

According to the student teachers on the videos, it is great to be able to familiarise themselves with an international project from the teacher's point of view and see how keen and motivated the children are. The students find eTwinning to be an excellent tool for future teachers.

eTwinning is «an environment that offers good examples and ways to develop myself as a teacher. Especially in the case of a future teacher like myself», summarises student teacher Viljami Viskari⁷.

According to the educators involved, eTwinning for Future Teachers efficiently

^{5.} https://school-education.ec.europa.eu/en/insights/publications/full-report-etwinning-era-change-impact-teachers-practice-skills-and.

^{6.} https://www.oph.fi/en/news/2022/future-skills-future-teachers#:~:text=In%20eTwinning%2C%20it%20is%20also,and%20an%20inclusive%20teaching%20approach.

^{7.} The videos can be viewed with subtitles in Finnish and English on the Finnish National Agency for Education's (EDUFI) YouTube channel (https://www.youtube.com/watch?v=WtTOz2LI-jYQ&list=PLsBm4tVhwD2HWTZ_vO9MF_RIoBugtodz6).

addresses the indications included in the communication *School development and excellent teaching for a great start in life*:

- eTwinning provides teacher education and teaching practice with a tool that enables students to practise the skills they will need as future teachers under guidance;
- Future teachers require flexible cultural and linguistic competences in diverse environments and situations and eTwinning provides a network of teachers and student teachers in which it is possible to constantly develop competences, share concerns and thoughts, and receive support and ideas for building their role as a teacher.

4.7 Conclusions

Now with the eTwinning Community entering a new phase with the development of the European School Education Platform (ESEP) there is a new world of opportunities that open. The ESEP is the meeting point for all stakeholders in the school education sector – school staff, researchers, policymakers and other professionals – spanning every level from early childhood education and care to primary and secondary school, including initial vocational education and training. In this sense there is a high expectation to get more stakeholders involved and to invest on specific areas, such as research.

Other opportunities are also available such as increasing the collaboration with Erasmus Plus National Agencies for supporting school placements and mobility.

Our efforts will continue to focus on *supporting* the implementation of eTwinning methodologies and practices in the early stages of teachers' careers and training and *listening* to teacher educators, student teachers and National Support Organizations in order to keep bringing innovation and new opportunities for all.

To "e" or not to "e" in Ireland: ITE and eTwinning. Reality and opportunities of eTwinning

by *Úna Murray**

5.1 Ireland's "Education Age"

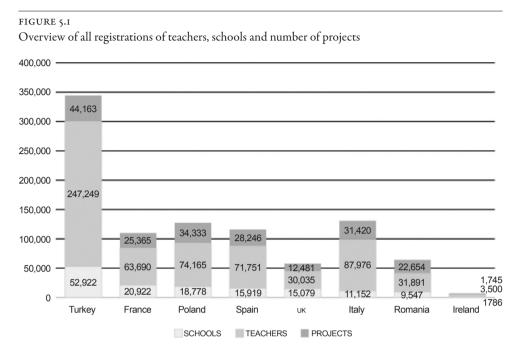
The Irish educational landscape has undergone considerable change in the last two decades. Changes in policies and practice saw free access to early childhood education, curricula reform at primary and lower second level, a renewed focus on areas such as literacy and numeracy, access to education and a proactive emphasis on digital literacy. It also heralded a new era in Initial Teacher Education (ITE). With the establishment of The Teaching Council in 2006 as the professional standards body for the teaching profession came a new emphasis on the professionalism of teachers. In 2006, eTwinning in Ireland was one year old.

This chapter explores eTwinning in Ireland under four paragraphs. PAR. 5.2 gives an insight into eTwinning in Ireland, the profile of Irish eTwinners and their project interests. PAR. 5.3 gives an overview of how eTwinning fits within Irish educational policy and within Initial Teacher Education in particular. PAR. 5.4 explores how ITE providers have engaged with eTwinning. PAR. 5.5 considers the affordances and challenges of eTwinning in the Irish ITE context. The chapter concludes with recommendations for moving forward.

5.2 What is the status of eTwinning in Ireland?

eTwinning has been part of many primary and second level schools in Europe since 2005, with countries such as Türkiye, France, Italy, Poland and Spain that lead the way in terms of integration into primary and second level teaching in both membership and active participation (FIG. 5.1). The profile of Irish participation in eTwinning requires commentary relative to its population size. According to the 2020 Report of

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Source: statista.com; data.oireachtas.ie. Numbers based on eTwinning platform figures (November 2020) collated by Ú. Murray.

eTwinning in Ireland, Ireland's registration figures represent 5% internationally of all eTwinning registered teachers, 1% of all registered projects and less than 1% of all registered schools on the eTwinning platform (D'Arcy, 2020).

When compared with top performing eTwinning countries, Ireland's percentage of registration seems low. However, Ireland's 5.3% indicates a more positive engagement when presented as a total number of teachers within Ireland. For example, with almost a million teachers (968,000) and one of the largest education systems, the registrations in Türkiye represent over 25% of teachers in the country. For France and Poland, eTwinning registrations represent approximately 7% of total teachers in the respective countries, while UK eTwinning registrations represent 4.7% of all teachers. By comparison, Irish teacher eTwinning registrations represent 3% of the total number of teachers. Irish teacher eTwinning registrations represent 5.3% of the total. This means that the percentage of Irish teacher registrations is not too far behind these countries in general terms.

5.2.I. WHAT IS THE PROFILE OF IRISH ETWINNERS?

A desk study analysis of all school registrations on the Irish eTwinning register was conducted in 2019 (Murray, 2020) aiming to determine:

the breakdown of registrations between primary, post-primary and third level;

| TABLE 5.1 | |
|-------------------------------|-------------------------|
| Overview of analysis of Irish | eTwinning registrations |

| Educational categories | Registration breakdown | Registration breakdown in % | As a % of total registration in that category |
|---|---------------------------|--------------------------------|---|
| Primary | 802 | 54% | 26% |
| Second level | 550 | 37% | 76% |
| Special schools | 29 | 2% | 22% |
| Further education institutions | 17 | 1% | 4.7% |
| International/heritage language education | | | |
| organisations | 15 | 1% | Not available |
| English language schools | IO | 0.7% | 5% |
| Education centres | 9 | 0.6% | 30% |
| Preschool | 8 | 0.5% | 0.4% |
| Third level (Universities and Institutes | | | |
| of Technologies) | 8 | 0.5% | 34% |
| Irish entries from abroad | 8 | 0.5% | |
| Other | 34 | 2.3% | |

Source: data collated by Ú. Murray (2019-20); % based on figures available on https://data.oireachtas.ie/ie/oireachtas/libraryResearch/2020/2020-04-03_l-rs-infographic-education-in-ireland-a-statistical-snapshot_en.pdf.

- the geographical distribution of these registrations;
- the subject areas that Irish eTwinners are interested in;
- the profile of ITE provider registrations.

In total this comprised 1,621 institutional related registrations. When the data was cleaned to ensure institutions were represented by one entry, the final figure was 1,490. All registrations were checked against the Department of Education lists of recognised schools and categorised into primary schools, post-primary schools, preschool, third level, special education schools, further education, English language schools and international schools in Ireland. It must be noted that these figures are pre-COVID and only refer to those who have *initiated* projects from Irish second level schools. TAB. 5.1 gives an overview of the findings of the distribution of the registrations across categories.

Analysis of the overall categories of Irish registrations found that eTwinning registrations are mostly represented by the primary and second level sectors. Those affiliated to primary schools represent 54% of registrations while post-primary registrations comprise 37%.

The overall picture at primary and second level is positive. As a proportion of the overall number of schools at primary and second level in Ireland, the interest in eTwinning is high. The registrations at these levels represent approximately 76% uptake of all schools at post-primary level nationally and roughly 26% at primary level. The remaining registrations with 2% or less representation comprise special educational

schools, English language schools, and international and heritage language education schools in Ireland such as polish or Lithuanian. Further education institutions are on a par with such schools in terms of registration levels. Third level registrations make up less than 1% of the total eTwinners. However, when expressed as a percentage of the overall number of providers as of 2019, it is more than one-third of the total number of third level institutions. Within ITE, there are 14 HEIS nationally that offer ITE at post-primary level. Of these, 5 are registered as eTwinners and only 2 are active contributors.

5.2.2. WHERE ARE IRISH ETWINNERS LOCATED?

There are 26 counties in Ireland that are divided into four provinces: Connacht, Leinster, Munster and Ulster. In this data analysis, Dublin, as the largest urban area with a population of over 1.4 million is represented as its own "province". TAB. 5.2 shows the breakdown of registrations by province and the percentage of projects undertaken within this province compared to the overall number of projects nationally.

Nationally, Dublin has 21% of registration but as a region has almost 80% uptake of all second level schools with 148 of 186 schools registered. Leinster with the largest number of counties (10) is at 20% with a 13% uptake in projects while Munster with 18% registration has over 41% uptake in projects. When registration distribution is compared with the number of projects initiated by Irish eTwinners up to 2019, certain geographical areas are more active than others. To take two examples, Meath (in Leinster), with a population of 220,000 approximately, has 19 school registrations out of a possible 21 post-primary schools within the county, but zero projects initiated. Cork (in Munster) by contrast, with a population of 580,000, has 55 schools registered and 10 projects initiated.

When project registrations are compared with the location of the 17 eTwinning ambassadors, there seems to be a link between geographical hotspots in terms of activity and locations of the eTwinning ambassadors. In 2019 Ireland had 17 eTwinning ambassadors. Regionally they were located in 5 of the 6 counties in Munster, namely

TABLE 5.2
Distribution of registrations and projects across provinces in Ireland based on 2019 registration lists

| | Dublin | Connacht (West) 5 counties | Leinster (East) 11 counties | Munster (South) 6 counties | Ulster (North) 3 counties |
|------------------------------------|--------|-------------------------------|--------------------------------|-------------------------------|------------------------------|
| % registrations | 21% | 20% | 20% | 18% | 21% |
| by province (2018-20) | | | | | |
| % of overall projects | 36% | 10% | 13% | 41% | 0% |
| by province | | | | | |
| Source: data collated by Ú. Murray | | | | | |

Limerick, Waterford, Tipperary, Cork, and Kerry; one county in Connacht (Galway) and in 3 out of 10 counties in Leinster (Offaly, Kildare Wexford). Dublin too had its own ambassadors. It is interesting to note, however, that the number of eTwinning ambassadors had grown in Ireland in tandem with increased registrations from 11 in 2015 to 17 in 2019 (D'Arcy, 2020).

5.2.3. WHAT ARE THE POPULAR SUBJECT AREAS OF POST-PRIMARY IRISH ETWINNERS?

An analysis of the interest areas that post-primary teachers ticked when registering show that Arts and Humanities are the most popular subject area with Irish eTwinners (45%), followed by Social Sciences (29%) and Science (14%). A considerable number of eTwinners in fact ticked that they or their school were interested in all subject areas for eTwinning engagements. However, of eTwinners who limited their interest options to one subject area, modern languages were the most popular subject. When eTwinners gave two or more areas of interest, modern languages were chosen alongside language and literature, music, or art. An analysis of the choice of projects initiated by Irish eTwinners also indicates that eTwinning is used primarily for cultural and linguistic knowledge development with Modern Foreign Language (MFL) project interests (28%) topping the list, followed by History (22%), Visual Arts (18%), and Science (14%).

In summary, the findings of this desk-based study found increased activity in regions where ambassadors are located, that registration as an eTwinner did not necessarily equate to participation, and that project activity seems to be associated with European language and culture. In 2020, an independent report *An Evaluation report of eTwinning in Ireland* was published (D'Arcy, 2020). This report presents the findings from a mixed methods study with active and dormant registered Irish eTwinners. In total 125 active eTwinners replied to a survey and 23 active eTwinners were interviewed. The research revealed that 92% of teachers cited the importance of collaboration with other countries as one of the main benefits of engagement with eTwinning; 89% cited networking with other professionals, and 88% referred to skills and knowledge development. The report also found that the most popular partners were France, Spain, Italy and Poland for Irish eTwinning partners.

5.3 eTwinning and Irish policy landscape

5.3.1. HOW DOES ETWINNING ALIGN WITH IRISH SCHOOL POLICY IMPERATIVES?

The "e" in eTwinning not only stands for "electronic communication", but also for "European" and "education" in its broadest sense (Murray, 2020), and all three "e"s

align with Irish educational digital, language and ITE policies. The profile of Irish eTwinners and their projects outlined in PAR. 5.2 strongly suggest that eTwinning is most deployed as a means of connecting with European countries in the context of language and intercultural learning. Recent curriculum and policy drivers may contribute to this focus. Between 2014 and 2021 curricula at ISCED Level 2 underwent significant changes. Specifically, changes to the English curriculum were closely followed by reform to MFL curricula. Within the new language specifications there are three strands where students' communicative competence, language awareness and sociocultural knowledge and intercultural awareness are developed in an integrated way (Department of Education and Skills of Ireland, 2015). While these changes were in train, the Digital Learning Framework for Post-Primary Schools (Department of Education and Skills of Ireland, 2017) was piloted and rolled out. Furthermore, the Languages Connect strategy (Department of Education and Skills of Ireland, 2015) reinforced connectivity, inclusivity, and diversity. During this time eTwinning in Ireland saw its largest growth where the number of registered Irish projects went from 120 in 2017 to 322 in 2019 (D'Arcy, 2020).

One of the key recommendations of the 2021 eTwinning Monitoring Report found that «promoting or referencing eTwinning in national official documents would legitimize the importance of eTwinning among teachers who are less keen to challenge their methodology and teaching practice» (European Commission, 2021). The policies discussed above refer explicitly to eTwinning. eTwinning is specifically referred to in Languages Connect, Ireland's Strategy for Foreign Languages in Education 2017-2026, as well as in Digital Action Plan 2020 (Department of Education and Skills of Ireland, 2020) that is linked to the 2017 Digital Learning Framework. They emphasise the importance of professional development of teachers in order to «raise awareness of eTwinning and other relevant EU and international resources and learning opportunities through online CPD and other PDST/PDST-TIE dissemination channels». This policy provision has been enacted through continuing professional development channels and has resulted in an increase in language-focused projects (D'Arcy, 2020). In November 2019, Digital Communities of Practice (COPS) were facilitated by the Professional Development Service for Teachers, Technology in Education (PDST-TIE) to plan for best practices with 15 regional events and 291 participants. eTwinning was specifically addressed during these events. These COPS facilitate the sharing of practice and promote collaboration between schools on the use of the DLF (Digital Learning Framework). The Digital Action Plan (Department of Education and Skills of Ireland, 2020), goes on to state that «all the COPs have received training on how to use the eTwinning platform to share practice and collaborate online» and it describes eTwinning as offering «opportunities for schools and their pupils/students to share practice and to collaborate on the use of digital technologies in teaching and learning».

As regards Initial Teacher Education, policy around the role of eTwinning is less explicit. In 2011, the Irish Teaching Council published its *Policy on the Continuum of*

Teacher Education drawing on recommendations from the Council of the European Union conclusions of 12 May 2009¹. This document and subsequent guidelines and revisions on the structure and content of ITE programmes in Ireland have emphasised the importance of embedding digital learning in and through ITE provision.

In 2020, new Standards for Initial Teacher Education, called "Céim", the Irish word for "Step", were published. Newly accredited ITE programmes that fall under these standards begun in September 2022. Although the previous 2011 and revised 2017 guidelines emphasised the embedding of digital skills in to ITE programmes, Céim goes one step further by stating that digital skills are now one of seven core elements that new ITE programmes must have. These digital skills are to include digital literacy; the use of digital technologies to support teaching, learning and assessment for all learners; the integration of digital skills across the programme including opportunities for student teachers to explore new and emerging technologies. It is envisaged that digital skills will be embedded across all aspects of the new programmes. eTwinning is not directly referenced in this document, but the Céim priorities align closely with the affordances of the eTwinning platform. The first cohort of teachers will emerge from Céim in 2024, and the impact of new policies will become evident.

Ireland, although not at the forefront of digital education within ITE, is nevertheless not behind in developing and integrating digital policy with practice. Ireland is one of 11 out of 43 European education systems that have developed criteria and or standards as guidance for teachers in the classroom. Ireland is also only one of 5 educational systems to have such criteria across the three levels and one of 14 to have digital learning in teaching and learning as criteria in external assessment of schools by the Ireland's Department of Education School Inspectorate (European Commission/EACEA/Eurydice, 2019).

5.3.2. ETWINNING ITE IN IRELAND

There are currently 14 ITE providers listed by the Irish Teaching Council. 8 third level institutions are registered on eTwinning as of November 2019, amounting to 1% of total eTwinning registrations. Of these 8 third level institutions, 5 offer ITE at post-primary level, while 1 offers preschool ITE and 2 specifically offer ITE at primary level only. The majority of these 8 offers both consecutive and concurrent post-primary programmes in certain subject areas. These 8 institutions are represented by 26 eTwinning registrations.

Of these 26 individual registrations:

- 1 registration is preschool;
- 1. Document 52009XG0528(01), Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020).

- 15 are linked to primary teacher education providers with interests stated as ICT and music;
- 10 are linked to post-primary education providers.
 Of the registrations from institutions that offer post-primary ITE:
- 9 state their interests as MFL;
- 2 have taken part in projects;
- I project involves MFL eTwinning project with another national ITE provider;
- ITE institution has initiated projects.

As the analysis suggests, the registration of educators from ITE providers is low and engagement in projects is typically at initial stages. The interests are predominantly similar to that of post-primary teacher registrations in relation to MFL. Although progressing in terms of teacher involvement, Ireland would be considered an observer country in terms of ITE, but it is growing. In 2020 the registrations under ITE comprised 4%, of which 3% was student teachers and 1% ITE lecturers and pedagogical advisors (D'Arcy, 2020). As of 2022, a number of specific ambassadors are linked with ITES.

5.3.3. WHAT DOES AN ITE PROJECT IN IRELAND LOOK LIKE?

Gajek (2018) identifies two types of eTwinning projects undertaken by teachers: collaborative and cooperative. In the latter, projects are undertaken *for* the other partner (eTwinner), whereas in the former projects are undertaken *with* the partner. The following is an example of a collaborative project in and between Irish ITEs and, as an example of one of the only registered intra-eTwinning ITE projects, exemplifies the many affordances of eTwinning. It also typifies the prominence of eTwinning as a COP for language teachers, even within ITE.

In 2019 the eTwinning MFL project was initiated between two Initial Education Providers – the aim was twofold. Firstly, it set out to create opportunities for collaboration between ITE students of modern languages to prepare them to lead future collaboration across ITE modern language departments, both as student teachers and in their careers ahead. Secondly, it promoted collaboration among language teacher educators across national institutions. In this project students used the eTwinning platform to collaboratively plan lessons, share resources and lesson plans. Ultimately the aim was to incorporate the project as an assessment component to help motivate collaboration. Although the project was spurred by an energising interest in the possibilities of eTwinning in ITEs, the project was stalled by the arrival of the pandemic. Students became overwhelmed by the extra demands that the pandemic placed on them, and the project was discontinued. It is planned, however, to reincorporate this into the ITE programme post-COVID².

5.4 Affordances and challenges

5.4.1. WHAT DOES ETWINNING AFFORD STUDENTS AND EDUCATORS IN ITE?

eTwinning offers the potential to build communities and partnerships that transcend geographic, sectoral and national boundaries. For Ireland, as an island nation at the margins of Europe geographically, eTwinning is particularly attractive. Not only does it allow participants to increase cultural awareness, their awareness of globalisation and their foreign language skills (Vescio *et al.*, 2006; Cresswell, 2009 etc.), but it also fosters inclusivity as a medium that transcends socioeconomic divisions. It provides mobility without the cost of foreign school tours or student exchanges. This zero-cost factor of eTwinning was also found in Donlon, Brown and Costello's (2020) crowd-sourcing study of the most popular type of EdTech tools where most of the respondents were from Ireland. Almost 1,194 Irish schools (primary and second level out of a total of almost 4,000 schools) have been designated part of the Delivering Equality of Opportunity in Schools (DEIS) programme in 2022, a programme that addresses educational disadvantage. eTwinning allows all teachers and students regardless of location or socioeconomic status opportunities to engage with and experience other cultures and languages in a cost-effective way.

The economic benefits of eTwinning are also important from the Irish student teachers' perspective. The increased duration of the consecutive ITE programmes from one to two years, the associated programme fees (between 6,000 euro and 7,000 euro per year) and cost of living have impacted the numbers enrolling on consecutive ITE programmes (Ní Dhuinn, Prendergast, Loxley, 2019). Student teachers do not get paid for their hours associated with their teaching practice in Ireland. Therefore, any opportunities to expand their own subject knowledge, cultural or pedagogical knowledge in a cost-effective way is welcomed.

The skills that eTwinning affords are also embedded within curricula at lower second level in Ireland as part of the Framework for Junior Cycle (Department of Education and Skills of Ireland, 2012). The key skills of junior cycle are Managing Myself, Staying Well, Communicating, Being Creative, Working with Others, and Managing Information and Thinking. Digital technology forms part of each of the skills (*ibid*.). The 2018 eTwinning Monitoring Report confirms that the involvement in eTwinning activities is linked to the improvement of teachers' perceptions about their digital, pedagogical, and collaborative competences (Pateraki, 2018). Other positive affordances of eTwinning include «life skills, and the capability to exchange and collaborate, as well as to learn new ICT skills, communication skills, and other interdisciplinary working skills» (Kearney, Gras-Valázquez, 2018; Papadakis, 2016). When teachers participate in a learning community such as eTwinning, their students benefit as well (Vescio, Ross, Adams, 2008).

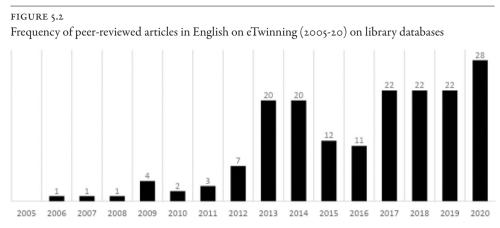
5.4.2. WHAT ARE THE BARRIERS FOR ETWINNING WITHIN IRELAND?

In Ireland, challenges for the integration of eTwinning exist both in ITE, and within schools. These challenges can be divided into "first order barriers" and "second order barriers" (Zinger, Tate, Warschauer, 2017). First order barriers can be localised within the school or can be associated with factors external to the teachers such as broadband, internet access, hardware access, technical support, time etc. (Ertmer, 1999). In the Irish report 6% of teachers referred to lack of technical knowledge and skills to use the eTwinning site while 32% attributed it to accessibility of the platform (D'Arcy, 2020). Such technical support, viewed as a universal requisite for successful pedagogical practices in technology-rich classrooms (Zinger, Tate, Warschauer, 2017), is available through the Irish NSO in a variety of ways. The support is welcomed and used by Irish eTwinners. 69% of respondents reported accessing resources for support, 21% contacted the NSO directly, while face-to-face events, school visits from ambassadors and representatives of the NSO were also reported as other supports (D'Arcy, 2020).

The issue of time is a challenge for Irish eTwinners. 40% of active Irish eTwinning respondents attributed lack or limited engagement with eTwinning to lack of time. Time for participants to engage with the technology and to practice or integrate into practice is vital for successful integration of eTwinning (Holmes, 2013; Gouseti, 2013). Holmes recommends that «policymakers should focus on providing CPD in which teachers can experience the pedagogical value of using ICT in their everyday teaching», making teachers advocators rather than barriers to the change (Holmes, 2013, p. 107). Yet the difficulty of creating this space, even to attend NSO events was cited as a challenge by Irish eTwinners where 61% referred to time restraints and 41% to lack of substitution cover in schools so that they could attend as barriers (D'Arcy, 2020).

The integration of eTwinning within ITE in Ireland faces similar time challenges. The Guidelines for ITE providers are quite prescriptive in terms of allocation of credits to core aspects such as student teacher placement, subject pedagogies, and core modules. Courses also need to be accredited by their institutions. This takes time. While the awareness of eTwinning is certainly increasing nationally, and Céim now sees digital skills as core to ITE programmes, the integration of eTwinning as a digital technology within ITE will also take time.

That ITE staff should take a more active role if a Community of Practice (COP) is to sustain into early career stage of teachers is highlighted in a study by Zimmermann et al. (2016). However, it must also be noted that Initial Teacher Education is not just provided by the ITE providers. It is a partnership with schools and the teachers within those schools. In Ireland, «school placement is a central feature of initial teacher education, where student teachers are welcomed and supported by HEI [Higher Education Institutions] tutors, school principals, class teachers and the school community» (The Teaching Council, 2020, p. 17). School placement comprises 40% of the course time and student teachers must successfully complete this element of the programme.



Source: data collated by Ú. Murray.

This placement «is underpinned by a shared professional understanding that collaborative engagement with school placement provides professional learning opportunities for all involved» (*ibid.*). Therefore, as eTwinning increases within schools, so too will the exposure of student teachers to this COP. By experiencing curricular-focused usage of technology, pre-service teachers would be better able to understand the affordances (both positive and negative) of using technology in their future classes (Zinger, Tate, Warschauer, 2017). Change also happens when teachers believe in the pedagogical value after seeing for themselves the positive effect on their pupils' learning (Ertmer, Ottenbreit-Leftwich, 2010). Therefore, seeing eTwinning in action in schools, student teachers' development is motivated by learners' desire to enhance functionality, facilitated by learners' recognition of diversity, made evident by the opportunities in the environment, and driven by an ongoing, flexible adjustment to a particular yet constantly evolving context (Larsen-Freeman, 2014).

While time is a major challenge, the lack of interest of some Irish schools in eTwinning is also referred to by respondents as a reason for lack of engagement (D'Arcy, 2020). This is what Zinger, Tate, Warschauer (2017, pp. 564-5) refer to as a "second order barrier". Second order barriers are more complex and more challenging as they involve teachers' beliefs and values, their self-efficacy, and their attitudes towards the use of technology in the classroom (Zinger, Tate, Warschauer, 2017). One of the findings of the evaluation report of eTwinning in Ireland found that «the innovative methodologies used within eTwinning are [...] not well documented in terms of linkages with the Irish curriculum» and that time is needed to «map out the activities and learning against the curriculum» (D'Arcy, 2020, p. 16). The same could be said for eTwinning within ITE in Ireland. Teachers and Educators must see the relevance of the technology for teaching and learning, and that to help teachers rethink their teaching practice, professional development should necessitate opportunities for teachers

in the dual capacity of both teaching and learning and that creates new visions of what, when and how teachers should learn (Darling-Hammond, McLaughlin, 1995). Within Irish education, opportunities exist for more clarity of how eTwinning maps to guidelines, policy and practice at all levels.

Additional research is also needed to explore these affordances and challenges. While the number of studies and articles written between 2005 and 2020 has grown (cf. FIG. 5.2), there is an increasing need for further research in the area within Ireland and specifically on eTwinning within ITE. Within Ireland there is a similar need for research on online COPS, a fact referenced recently by Ó Beaglaoich and Crotty (2020).

5.5 Recommendations for moving forward within Ireland

It is evident from research that online communities of practice have positive outcomes for the participants; that to be effective, they should have an authentic reason to collaborate and that introduction at pre-service is recommended. Therefore, a dual approach is needed within Ireland. The current interests of Irish teachers should be harnessed and subsequently supported within ITE. ITEs within Ireland should focus on developing and sharing models of best practices. The impact of ambassadors on the growth of eTwinning has been recognised with the inclusion of ambassadors that are based within ITEs. The Irish project initiated between ITEs is an example of how Irish ITE providers may sow the seed of its possibilities and reap the benefits within schools. However, continued professional development on eTwinning for teachers at all stages of career development is needed.

In conclusion, Initial Teacher Education in Ireland is moving forward. The integration of Digital Skills as a core element in Céim highlights the emphasis on the three "i"s of innovation, integration and improvement. While merging the three "i"s with the three "e"s of eTwinning (electronic communication, European, education) will take time, it is important to remember that when letters come together, words form and communication begins.

References

CASSELLS D. et al. (2015), eTwinning Generation: Celebrating Ten Years of eTwinning, Central Support Service for eTwinning, European Schoolnet, Brussels (https://www.leargas.ie/wp-content/uploads/2021/06/eTwinning-Generation.pdf).

CRAWLEY C. et al. (2009), Beyond School Projects: A Report on eTwinning 2008-2009, Central Support Service for eTwinning, European Schoolnet, Brussels.

CRESSWELL M. (2009), A World of CPD Opportunities, in "Education Review", 21, 2, pp. 122-7. D'ARCY I. (2020), An Evaluation Report of eTwinning in Ireland, Léargas, Dublin.

- DARLING-HAMMOND L., MCLAUGHLIN M. (1995), Policies That Support Professional Development in an Era of Reform, in "Phi Delta Kappan", 92, 6, pp. 81-92.
- DEPARTMENT OF EDUCATION AND SKILLS OF IRELAND (2012), Key Skills of Junior Cycle, https://www.curriculumonline.ie/getmedia/def48e3f-68f9-42e4-95de-f30086321fdo/JSEC_Key_Skills_of-JC_English%29.pdf.
- ID. (2015), Languages Connect, Ireland's Strategy for Foreign Languages in Education 2017-2026, Department of Education and Skills, Dublin (https://www.gov.ie/en/publication/dd328-languages-connect-irelands-strategy-for-foreign-languages-in-education-2017-2026/).
- ID. (2017), *Digital Learning Framework for Post-Primary Schools*, Department of Education and Skills, Dublin (https://www.dlplanning.ie/wp-content/uploads/2018/10/digital-learning-framework-post-primary.pdf).
- ID. (2020), *Digital Action Plan 2020*, Department of Education and Skills, Dublin (https://www.gov.ie/pdf/?file=https://assets.gov.ie/216682/b54d3433-f304-4ac4-88e1-453e1873d3c2.pdf#page=null).
- DONLON E., BROWN M., COSTELLO E. (2020), Collaboration, Collation and Competition: Crowdsourcing a Directory of Educational Technology Tools for Teaching and Learning, in "Australian Journal of Educational Technology", 36, 3, pp. 41-55 (https://ajet.org.au/in-dex.php/AJET/article/view/5712).
- ERTMER P. A. (1999), Addressing First- and Second-order Barriers to Change: Strategies for Technology Integration, in "Educational Technology Research and Development", 47, 4, pp. 47-61.
- ERTMER P. A., OTTENBREIT-LEFTWICH A. T. (2010), *Teacher Technology Change: How Knowledge, Confidence, Beliefs, and Culture Intersect*, in "Journal of Research on Technology in Education", 42, 3, pp. 255-84.
- EUROPEAN COMMISSION (2021), Embedding eTwinning in National Educational Policies from Practice to Policy: Sumamry Report 2021, Publications Office of the European Union, Luxembourg.
- EUROPEAN COMMISSION, EACEA, EURYDICE (2019), The Structure of the European Education Systems 2019/20: Schematic Diagrams, Eurydice Facts and Figures, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/d7885072-f3ac-11e9-8c1f-01aa75ed71a1).
- GAJEK E. (2018), Curriculum Integration in Distance Learning at Primary and Secondary Educational Levels on the Example of eTwinning Projects, in "Education Sciences", 8, 1.
- GALVIN C. et al. (2021), Building Cultural Awareness and Understanding in Europe's Schools: Insights From the European Commission's eTwinning Programme, in W. J. Hunter, R. Austin (eds.), Blended and Online Learning for Global Citizenship: New Technologies and Opportunities for Intercultural Education, Routledge, New York.
- GILLERAN A. (2019), eTwinning in an Era of Change: Impact on Teachers' Practice, Skills and Professional Development Opportunities, as Reported by eTwinners, Central Support Service for eTwinning, European Schoolnet, Brussels.
- GOUSETI A. (2013), "Old Wine in Even Newer Bottles": The Uneasy Relationship Between Web 2.0 Technologies and European School Collaboration, in "European Journal of Education", 48, 4, pp. 570-85.
- HOLMES B. (2013), School Teachers' Continuous Professional Development in an Online Learning Community: Lessons from a Case Study of an eTwinning Learning Event, in "European Journal of Education", 48, 1, pp. 97-112.

- IBISWORLD (2022), *Third-level Education in Ireland trends (2017-2022)*, https://www.ibisworld.com/ireland/market-research-reports/third-level-education-industry/.
- KEARNEY C. (2016), Monitoring eTwinning Practice: A Pilot Activity Guiding Teachers' Competence Development, Central Support Service of eTwinning, European Schoolnet, Brussels.
- KEARNEY C., GRAS-VALÁZQUEZ À. (2018), eTwinning Ten Years On: Impact on Teachers' Practice, Skills and Professional Development Opportunities, as Reported by eTwinners, Central Support Service of eTwinning, European Schoolnet, Brussels.
- LARSEN-FREEMAN D. (2014), Complexity Theory, in B. VanPatten, J. Williams (eds.), Theories in Second Language Acquisition: An Introduction, Routledge, New York, pp. 227-44.
- LAWLOR D., BURKE S. (2020), *Education in Ireland: Statistical Snapshot*, https://data.oi-reachtas.ie/ie/oireachtas/libraryResearch/2020/2020-04-03_l-rs-infographic-education-in-ireland-a-statistical-snapshot_en.pdf.
- MURRAY Ú. (2020), Ready, Steady, Bake! eTwinning, Transition and Initial Teacher Education, Léargas Research Forum (online), Trinity College Dublin, Dublin.
- NÍ DHUINN M., PRENDERGAST M., LOXLEY A. (2019), "Minister Can You Spare a Euro?": The Financial and Emotional Costs of Becoming a Teacher, conference held at the American Educational Research Association, Toronto, Canada.
- Ó BEAGLAOICH P., CROTTY Y. (2020), "Meitheal Muniteori": Planning for an Online Community of Practice (OCOP) with Post-Primary Teachers in the Irish-Medium (L1) Sector, in "Sciendo", 7, 1, pp. 10-8.
- PAPADAKIS S. (2016), Creativity and Innovation in European Education: Ten Years eTwinning: Past, Present and the Future, in "International Journal of Technology Enhanced Learning", 8, 3-4, pp. 279-96.
- PATERAKI I. (2018), Measuring the Impact of eTwinning Activities on Teachers' Practice and Competence Development: Monitoring eTwinning Practice, Central Support Service of eTwinning, European Schoolnet, Brussels.
- SCIMECA S. et al. (2009), European Schoolnet: Enabling School Networking, in "European Journal of Education", 44, 4, pp. 475-92.
- THE TEACHING COUNCIL (2011), *Policy on the Continuum of Teacher Education*, Maynooth (https://planipolis.iiep.unesco.org/en/2011/policy-continuum-teacher-education-5559).
- ID. (2020), *Céim: Standards for Initial Teacher Education*, Maynooth (https://www.teaching-council.ie/assets/uploads/2023/08/ceim-standards-for-initial-teacher-education.pdf).
- OECD (2019), Chapter 1: The Turkish Education System, https://www.oecd-ilibrary.org//sites/71ee93b4-en/index.html?itemId=/content/component/71ee93b4-en#section-d1e3201.
- VESCIO V., ROSS D., ADAMS A. (2006), A Review of Research on Professional Learning Communities: What Do We Know?, paper presented at the NSRF Research Forum, January (https://larrycuban.files.wordpress.com/2012/06/research-vescio_ross_adams.pdf).
- ID. (2008), A Review of Research on the Impact of Professional Learning Communities on Teaching Practice and Student Learning, in "Teaching and Teacher Education", 24, 1, pp. 80-91.
- ZIMMERMANN B. et al. (2016), "Facebook Me: The Potential of Student Teachers' Online Communities of Practice in Learning to Teach, in "International Journal of Education and Literacy Studies", 8, 2, pp. 62-70.
- ZINGER D., TATE T., WARSCHAUER M. (2017), Learning and Teaching with Technology: Technological Pedagogy and Teacher Practice, in D. J. Clandinin, J. Husu (eds.), The SAGE Handbook of Research on Teacher Education, vol. 1, SAGE, London, pp. 577-93.

eTwinning and ITE in France

by Elizabeth Sauser-Monnig and Stephen Cudby*

6.1 Introduction

Initial Teacher Education in France is primarily based on a system of teacher colleges called *Institut national supérieur du professorat et de l'éducation* (INSPÉ), present in every academic region in mainland France and in overseas regions. There are 32 INSPÉ as well as one national institution dedicated to training future teachers for specialized agricultural high schools. There is one INSPÉ in each academic region, often with multiple locations within the region. INSPÉ offers programs preparing students to become teachers, most significantly, a Master's Degree for teaching in primary and secondary schools, *Métiers de l'Enseignement, de l'Education et de la Formation* (MEEF), during which students take a competitive exam that will allow them to become a teacher with a permanent status within the public sector. Young people wishing to become teachers can begin in specialized preparatory schools or in *Licence* (3 years university Degrees) specific to education or can directly join the MEEF with 3 years Degree from a different subject area¹.

Since the first European pilot in 2013, eTwinning's activities in initial teacher education in France have primarily focused on students in their 2nd year of the MEEF Degree, as they have teaching periods in classrooms and are thus able to register on the eTwinning platform and carry out eTwinning project activities. However, in recent years, introductions to eTwinning have also been organized for students in their 1st year of the MEEF master's program.

The goals of embedding eTwinning in Initial Teacher Education at a European and a French level are to allow future teachers:

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^{1.} Cf. the following links: https://www.devenirenseignant.gouv.fr/pid33962/les-inspe-pour-for-mer-les-futurs-enseignants.html; https://www.devenirenseignant.gouv.fr/cid98901/de-licence-master-meef.html; https://www.reseau-inspe.fr/.

- to discover and experiment with project-based pedagogy and interdisciplinary teaching practices;
- to experience European and international cooperation and intercultural situations;
- to develop language skills, digital skills and other professional skills such as developing projects with other education professionals, defining project goals, carrying out project planning and working within a diverse team of people;
- to allow future teachers to reflect upon the teaching profession in a European context, upon professional practices by means of exchanges and collaborative work with teachers and future teachers from different school systems.

The underlying assumption is that if student teachers are exposed to the idea of European cooperation during training, if they experience interdisciplinary projects and collaborative projects using digital tools with another school, they will be more likely to integrate one or more of these aspects in their teaching practices once they are confirmed teachers.

eTwinning activities in Initial Teacher Education in France have been introduced to varying degrees in several INSPÉ, partially thanks to eTwinning ambassadors who are also teacher educators within their local INSPÉ (Strasbourg, Corse for instance). Regional eTwinning Representatives from Réseau Canopé, the organization responsible for eTwinning in France, also organize training sessions within various INSPÉ (Grenoble, Nice, Amiens for instance) alongside eTwinning teacher ambassadors.

6.2 A variety of practices and models

Training about the eTwinning program, project methodology and platform is delivered primarily through the eTwinning National Support Organization and, crucially, through its network 30 regional representatives and approximately 180 eTwinning ambassadors who are teachers in the majority, but also school leaders (principals, inspectors, trainers). Beginning in 2013, different approaches have been tested in INSPÉ and a few implemented over several years, particularly in the Strasbourg and Amiens regions.

While there are different ways in which eTwinning has been introduced into ITE programs and nearly universally, it occurs generally through a connection between an individual INSPÉ and a member of our network of trainers. The approach offered in each case is also adapted to the profile of the future teachers – whether they are first year (with little classroom time) or second year students (with longer periods of classroom teaching with pupils) –, and which level and subject they will be teaching.

In Strasbourg, for instance, 2 eTwinning ambassadors who are language teachers in upper and lower secondary schools are also teacher educators at their local INSPÉ. They were able to embed an introduction to eTwinning and the development eTwinning projects directly into their courses, with the support of the INSPÉ pedagogical

| TABLE 6.1 eTwinning activity models in | ity models in ITE in France | | |
|---|---|--|--|
| Approach | Content or use | Goal | Target audience |
| Informational | An introduction to eTwinning through a module such as Simple initiation, generate interest 1st and 2nd year students in the "Discovering eTwinning," based on examples of projects run for some of them in the future. teaching Master's Degree by confirmed teachers as well as exchanges with eTwinning ambassadors about their personal experiences, what motivates them to continue working on eTwinning projects and the benefits for their pupils. Dunation: a few hours, at the most. | Simple initiation, generate interest for some of them in the future. | 1st and 2nd year students in the teaching Master's Degree (MEEF). |
| Hybrid mobility | eTwinning can be used to support student/educator mobil- Provide a tool and for those inter- 1st and 2nd year students in the ity, to prepare and document mobility as it is happening, for ested, a methodology, for articular- teaching Master's Degree one person or a group of people going to multiple destina- ing mobility and asynchronous (MEEF); international relations tions, to organize activities with host institutions. learning. | Provide a tool and for those interested, a methodology, for articulating mobility and asynchronous learning. | 1st and 2nd year students in the teaching Master's Degree (MEEF); international relations managers in the teaching university. |
| Project-based experiential learning | Students/future teachers participate in online collaborative Allow future teachers to experience 1st and 2nd year students in the activities such as introducing themselves and getting to an eTwinning project with the "puteraching Master's Degree know their partners, comparing school systems and teacher pil perspective". (MEEF); teacher educator that training programs, creating collaborative productions designs the project with support (e-books, video, webradio etc.). | Allow future teachers to experience an eTwinning project with the "pu- pil perspective". | 1st and 2nd year students in the teaching Master's Degree (MEEF); teacher educator that designs the project with support from eTwinning network. |
| | Local: students participate in a collaborative online project Experience online collaboration with other students from their own institution. learning situation. | Experience online collaboration about a topic; use digital tools in a learning situation. | |
| | National: students participate in a national project desig- Experience online collaboration ned and organized by trainers with students from other IN- about a given topic; use digital tospé. SPÉ. with future teachers in different regions. | Experience online collaboration about a given topic; use digital tools in alearning situation; exchange with future teachers in different regions. | |

(following)

TABLE 6.1 (following)

| Approach | Content or use | Goal | Target audience |
|---|--|---|---|
| Project-based experiential learning | Project-based European: students participate in a European project desig- Experience online collaboration experiential ned and organized by their trainers with Initial Teacher about a given topic; test digital toerarning Education organizations in other European countries (part-ols in alearning situation; exchange ner-finding opportunities are regularly offered by the Euro-with future teachers in different pean eTwinning office). | Experience online collaboration about a given topic; test digital tools in a learning situation; exchange with future teachers in different countries. | |
| Autonomous FTwinning Project | Design and implementation of an eTwinning project by fu- Gain experience in key phases of Reserved for 2nd year students in ture teachers: student-teachers in their 2nd year of training eTwinning project; experience a the teaching Master's Degree search for a partner in France or another European country, project from teacher perspective in (MEEF), support from teacher design a simple project to carry out with their pupils during a classroom setting; build pedago- educator or eTwinning ambassatheir teaching periods in schools and may also apply for an gical, methodological and digital dor. skills. | Gain experience in key phases of Rese eTwinning project; experience a the project from teacher perspective in (ME) a classroom setting; build pedago- educ gical, methodological and digital dor. skills. | treaching Master's Degree teaching Master's Degree (EF), support from teacher cator or eTwinning ambassa- |

manager. In Amiens, the regional eTwinning representative partnered with the coordinator of International Masters for Teacher Education to include eTwinning projects as one of the options for engaging in European activities for future teachers.

However, as described earlier, the Initial Teacher Education system in France is quite extensive in terms of the number of INSPÉ and in the variety of tracks leading to the teaching profession. The ITE institutions have extremely full curriculum and finding the best entry for eTwinning depends largely on identifying an actor within the ITE who is interested in introducing a European dimension, innovative or digital-based pedagogy or project offers that are particularly useful for future language teachers. Additionally, there are naturally varying levels of interest for eTwinning and a limited number of teacher educators already experienced in eTwinning. Thus, the French NSO has encouraged multiple approaches that are adapted to local situations.

The main approaches are as shown in TAB. 6.1.

Given the many different avenues and options available to INSPÉ as well as a certain basic level of information, the French NSO is developing different approaches to increase interest and uptake by INSPÉ. These include a self-guided course for teacher educators interested in eTwinning alongside resources and a course destined to future teachers. For the first time, a national face-to-face event for INSPÉ representatives (leaders, international relations officers, teacher educators) was organized in January 2023 to provide training and networking opportunities within eTwinning for 25 participants.

6.3 Voices from INSPÉ

At the INSPÉ of Strasbourg in the MEEF Degree for German, the international dimension is important and this is reflected in the curriculum both for the first year and the second year students. The first year students are part of an eTwinning project with students from an Initial Teacher Education institution in Freiburg. This project runs before, during and after a physical mobility which takes place at the end of the academic year.

As for the second year students, several parts of the program are designed to promote an international dimension to their training. Firstly, they also participate in an eTwinning project which promotes intercultural exchanges and also exchanges on teaching practices in France and Germany. Secondly, the trainee teachers who wish to do so are encouraged to set up and run their own eTwinning project with their pupils. Finally, there is also a physical exchange with trainee teachers from Stuttgart where the group work together on the theme of Europe. These exchanges are particularly rich and help develop the professional skills of the trainee teachers by giving them the opportunity to compare views on educational issues such as assessments, or the construction of lesson plans etc. (Christelle Sebillaud, German-language teacher, *professeur agrégé d'allemand*, Teacher Educator, INSPÉ Strasbourg).

It's very important to us to recognize student investment in eTwinning projects with official credits counting towards their diplomas. These credits aren't specific to the eTwinning projects, there are no "eTwinning credits". However, as eTwinning is fully integrated in teaching units where students are encouraged to undertake an interdisciplinary or cultural project, they receive credits for these projects (Corinne Mancel, English professor, and Hélène Claëys, International Relations and Pedagogical Head of the International Master MEEF, INSPÉ Amiens).

We decided upon a progression over the 2 years of the course. In the first year, the students take part in a project conceived and created by the team of teacher trainers. This allows them to discover the platform, to get acquainted with its different areas and also to have a first approach to project-based learning and teaching. Then in the second year we adopt a differentiated approach to the students depending on their availability, their curiosity, their attraction to innovative teaching methods. So, either we let then join a large project that we have set up but in which they will be autonomous and have to conceive the pedagogical elements, or we can also let them work on a project with a fellow classmate, and then we have some students who are completely independent and join an existing project or even create their own original project. The only difficulty they are faced with is that their potential partners are limited to student teachers and not all countries make student teachers responsible for a class during a year of their training. (Hélène Claëys, International Relations and Pedagogical Head of the International Master MEEF, INSPÉ Amiens).

6.4 From young teachers who began eTwinning during their initial teacher education

I participated in an international project through my university/INSPÉ. The goal was to share classroom practices between a French school and a Dutch school. We exchanged Christmas-themed postcards that the pupils made themselves. With my pupils, ages 8-10, we presented our city, Laon, with a *Kamishibai* (paper theater). The next year, while working towards my certification, my school participated in an Erasmus+ project involving 7 European schools. We worked together on the theme of Sustainable Development, especially on climate change.

Being introduced to eTwinning and having participated in projects has offered multiple opportunities, for the teachers and the pupils: speaking a foreign language, discovering other countries and cultures, sharing ideas, working together in groups, gaining confidence in oneself. It allows pupils to thrive as they open up to the world and are given the chance to become actors in their own learning process. I think it's a new way of learning, a different way of learning (Natacha Delacroix).

eTwinning has brought me so many things. Of course, there's the satisfaction of seeing my pupils make progress... But it also allows you to meet people from other countries and to see

how we think differently, to see that there are real differences in perspective. In eTwinning people are spontaneous. I've kept in touch with teachers with whom I ran projects 2 or 3 years ago. That builds a real community, we have shared something unique.

The other aspect that has been so enriching is the platform itself. We can participate in webinars and sign up for training. I've participated in multiple training sessions now and you can really choose the subjects that interest you. That allows us all to learn and develop new knowledge and skills in areas we're interested in (Julia Bohr).

eTwinning really offers an easy window into other languages. I love foreign languages, I speak multiple languages. eTwinning is a great opportunity for me and for my pupils as well. On a professional level, eTwinning really allows you to exchange with other teachers about their teaching practices and activities. For instance, how can we run an online activity together? Here in France, we have a way of doing things that's different from Croatia, for instance. It's really very interesting to compare pedagogical approaches we use with our pupils, to design an activity and work out how we'll implement in our respective classrooms. It's so interesting to see different approaches from one country to another (Ines Defachel).



eTwinning and ITE in Poland

by Marlena Lembicz, Barbara Muszyńska and Magdalena Wawrzyniak-Śliwska*

7.1 Introduction

eTwinning projects, present in schools across Europe since 2005, entered universities as Teacher Training Initiative (TTI) in 2012. Initially, the TTI brought together several countries that saw the importance for the future of the program of introducing the concept of online project work to university students and teachers. The primary aim was to provide them with an opportunity to familiarize themselves with the philosophy of project work, eTwinning platform and project tools before they start work at kindergartens and schools. Poland has been in this group almost from the very beginning, since 2013.

In 2019, the TTI program (later called Initial Teacher Education, ITE) became a regular feature of the éTwinning National Offices. Both university educators and students were encouraged to use the éTwinning platform and TwinSpace including all their functionalities. Apart from that, National Support Organisations (NSO) opened the online teacher training courses to them. Teacher trainers and student-teachers most frequently chose courses such as "eTwinning and ICT tools", that support effective and reliable documentation of project activities. Along the way, even before 2019, NSO representatives and regional eTwinning ambassadors shared their knowledge and experience with Polish university educators and their students. Today, Polish universities can still count on the support of the eTwinning ambassadors from schools, even though officially we now also have three ITE ambassadors.

The ITE initiative in Poland gathered a group of higher education institutions: the University of Gdańsk, the University of Lower Silesia in Wrocław, the University of Adam Mickiewicz in Poznań, the University of Arts in Poznań, the University of Białystok, Jagiellonian College, the University of Silesia, the University of Warsaw and The Jacob of Paradies University in Gorzów Wielkopolski. From the very beginning, the most active institutions have been: the University of Gdańsk, the University

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of Lower Silesia in Wrocław and the University of Adam Mickiewicz in Poznań. At the moment, there are 46 university educators of future teachers who have registered on the eTwinning platform in Poland and 20 of them actively use their accounts. Also, 578 students have registered on the eTwinning platform and 73 of them are officially involved in some projects. It needs to be stressed, though, that these numbers are much higher as at some institutions the projects are implemented without the partners joining the cooperation via the eTwinning platform.

The group of teacher training institutions in Poland have already implemented over 40 international projects with various institutions from Europe. What is more, they have also started a number of national projects with other Polish universities or with other institutes, departments or faculties within the same university. They cooperate with each other by carrying out short activities aimed at acquainting students with the functionalities of the platform, project structure and project effects and evaluation in cooperation with the regional eTwinning ambassador. Some students do not implement the project as such, but take part in practical training on the platform, learn about specific project activities and how to plan and implement their own projects assisted by an experienced eTwinning educator.

Below we present three models of eTwinning implementation in Initial Teacher Education in Polish universities that show the diversity of approaches we adopted. University of Gdańsk focuses most on intra-faculty and inter-faculty projects, the University of Adam Mickiewicz in Poznań on the cooperation between university and schools during students' internship and the University of Lower Silesia in Wrocław on international projects. Three universities, three roads to eTwinning.

7.2 Models of eTwinning implementation in higher education institutions in Poland

7.2.1. SMALL STEPS FIRST – START AT YOUR INSTITUTION: THE UNIVERSITY OF GDAŃSK

The University of Gdańsk joined the Teacher Training Initiative in 2016. From the very beginning the implementation of the ITE initiative was supervised by Dr. Ewa Andrzejewska (Institute of German Philology) and Dr. Magdalena Wawrzyniak-Śliwska (Institute of English and American Studies). In the same year they applied for the first grant from Gdańsk University Didactic Initiatives Program for an Educational Innovation "eTwinning UG-Integration of Information and Communication Technologies in Academic Training of Future Foreign Language Teachers (eTwinning UG-ITIKA)". The aim of the grant was to prepare university educators for project work with eTwinning by offering them a number of training sessions and seminars. Dr. Andrzejewska and Dr. Wawrzyniak-Śliwska were the beneficials of Gdańsk University Didactic

Initiatives Program for an Educational Innovation four times. In the academic year 2016-17 ("Mapping eTwinning") the seminars were organised for teacher trainers from the Institute of English and American Studies and the Institute of German Philology and later for other institutes within the Faculty of Languages, such as Institute of Polish Language and Literature, Institute of Russian and Eastern Studies and Institute of Romance Studies (2017-18, "eTwinning at the Faculty of Languages"). In the subsequent years the seminars were prepared for other faculties (2018-19, "eTwinning in Cross-Faculty Collaboration") and local language teachers (2019-20, "eTwinning in Collaboration with Schools"). The educational trainers taking part in the initiative were eTwinning ambassadors (Jolanta Okuniewska, Łukasz Kamiński, Maria Chodakowska-Malkiewicz, Ewa Flis-Gudelewicz) and university lecturers (Dr. hab. Jarosław Krajka, Prof. UMCS, Dr. Ewa Andrzejewska and Dr. Magdalena Wawrzyniak-Śliwska). The seminars proved to be very popular among university lecturers, school teachers and university students who joined many of the training sessions. The themes of the seminars varied. Some of them provided general information about eTwinning program ("eTwinning - general introduction", "Mysterious TwinSpace", "eTwinning platforms", "eTwinning - TTI Initiative. Introduction", "eTwinning in teaching and learning", "eTwinning and the Curriculum", "eTwinning – TTI Initiative", "eTwinning platforms for University studies", "eTwinning – TTI Initiative. Teacher development"). Some seminars were devoted to project planning and implementation ("eTwinning Projects – good practice", "eTwinning – project planning and implementation", "eTwinning – cross-curricular project work", "Project planning in collaboration with schools", "eTwinning educational projects", "eTwinning – from practice to practice", "Cross-Faculty projects"). Quite a few sessions offered training in several different tools that could be used in eTwinning projects ("Quizizz – how to motivate students and monitor their progress", "Tools and apps in eTwinning projects", "eTwinning – TTI Initiative. More tools and apps", "Digital escape room", "Educational games online", "Gamification and eTwinning", "ICT tools and apps in eTwinning projects", "ICT tools and student motivation", "ICT projects in the past and future. How to evaluate and appreciate eTwinning projects", "ICT tools in regular work online"). One of the sessions tackled the problem of COVID-19 lockdown ("eTwinning in the times of pandemic and lockdown").

Apart from training seminars, we also organized three eTwinning Conferences for university educators and students, school teachers and learners, in cooperation of Polish eTwinning Support Organisation:

- 10 June 2017, eTwinning in Schools and at University Innovative Teaching and Learning with ICT Tools;
- 21 May 2018, eTwinning UG Modern Education with ICT Tools;
- 21 May 2019, eTwinning UG Modern Cross-Curricular Education.

The conferences were a great success. They provided an opportunity for students to present their projects to a broader public: other students, university lecturers, school teachers and learners, making them feel proud of their achievement. Currently, we are planning to revive the tradition of eTwinning Conferences at University of Gdańsk.

Curriculum integration

Thinking about the implementation of eTwinning at University of Gdańsk we faced a number of questions: How to incorporate eTwinning in pre-service teacher training education? Should we design new courses or rather add eTwinning to the syllabi of the existing ones? Which ITE model of introducing eTwinning should we implement? Should we focus on BA or MA studies, or both? As we didn't know the answers to any of the questions, we decided to take a very slow approach, mapping the problems and searching for answers along the way.

The implementation of eTwinning program at the University of Gdańsk went through a number of stages. At the very beginning, in 2016-17, we used the funds from the University Didactic Initiatives Program for Educational Innovation to organize training seminars for Faculty of Languages lecturers with the aim to educate future university eTwinning trainers. Also, some students took part in the sessions, which made it possible to start eTwinning collaboration at the university. At the same time, we started the first international projects with La Mancha University in Spain.

Motivated by the results of our work in the previous year, in 2017-18 we decided to work on the syllabi of some teacher training courses at the Faculty of Letters. As eTwinning projects had already been mentioned in the Core Curriculum for foreign languages, it seemed natural to add some issues related to eTwinning projects to the syllabi of two courses: "Didactics for future language teachers" and "ICT for Teachers", both at BA and MA level. As far as project work is concerned, at BA level we continued inter-institute project collaboration with some spectacular results. At MA level students were involved in an international project with four other European universities from Hungary, Denmark, Italy and Spain.

In the academic year 2018-19 eTwinning projects were realized during "Didactics" and "ICT for teachers". However, at the same time we started working on the new Curriculum for the teaching specialisation and we decided to design a new course called "Educational Projects", which would be entirely devoted to the preparation and implementation of eTwinning projects. It was added to the curriculum for both BA and MA studies starting in 2019-20, to be realised in the second year of studies.

Since 2020-21 we could finally devote more time to project work and eTwinning in regular courses designed for the teaching specialisation. "ICT for teachers" provided students with the tools they could then use in the projects implemented in the new course "Educational Projects".

Project implementation

The first eTwinning project at the University of Gdańsk was launched in 2017 and since then new groups of students have realised a number of projects every year. They have been involved in three types of project work: local projects, at the Faculty of Languages, where the partners are students of two teaching specialisation programs,

English and German Philology; local, inter-faculty projects, with collaboration between students of two or more faculties; and international ones.

Although the partners of local projects are students from two institutes within the same faculty building, we have tried to imitate the context of "real-life" eTwinning work inviting the partner groups to communicate only online. The groups usually do not meet face to face until the eTwinning Conference in May or June, in which they present the results of their work. Most of the BA level projects have focused on issues connected with teaching and learning of English and German and usually included some elements of student research. Participants have compared classrooms in primary and secondary schools, investigated techniques used in teaching German and English, compared textbooks, interviewed school learners about their motivation to learn a foreign language and about their teachers and conducted a survey among university students. One of the most spectacular eTwinning research projects carried out by the Faculty of Languages students was "Foreign language teacher – learners' and students' perspective". School learners were asked to draw their teachers of English and German and provide some words and phrases describing them. University students (prospective teachers), on the other hand, were asked to take part in a survey, which investigated their beliefs and opinions about the foreign language teacher. Then, the two pictures were juxtaposed, showing unexpected differences between the two groups of participants.

An interesting example of an inter-faculty eTwinning project was "Plant Genus Loci", with the participants from three faculties: the Faculty of Languages, the Faculty of Biology and the Faculty of Oceanography and Geography. The project aimed to draw students' attention to the role of plants in the academic educational space and the distribution and diversity of plants in university buildings, to define the plant *genius loci* of the University of Gdańsk, investigate the notion of biophilic design and then design optimal biophilic spaces at the university. Students also learned new ICT tools and developed their collaboration and cooperation skills. The project was very challenging for the participants but again, students were overwhelmed by the results, which were presented at the eTwinning conference.

We have worked with a number of European educational institutions in international projects: the University of La Mancha, Facultad de Educación, Albacete (Spain), Universidad Pública de Navarra (UPNA), Pamplona/Iruña (Spain), the University of Budapest (Hungary), Hungarian University of Agriculture and Life Sciences, Szent István University Gödöllő (Hungary), Institute of Teacher Education in Aalborg Øst (Denmark), Tallin University (Estonia), Arctic University of Norway in Tromso, Associazione Scuola Paritaria Montessori di Como (Italy), Università Cattolica del Sacro Cuore, Milano (Italy). Some of the projects were shorter, some much longer and more challenging. The international project that we remember best and go back to very often, as it required enormous energy and time, is "Happiness-Sorrowness Map" in collaboration with teacher training institutions from Hungary, Denmark, Spain, Norway and Estonia. The aims of the project were to map happy and sorrow places

at member universities, learn about the well-being and environmental-conscious education and then suggest solutions to some problems mentioned by other members. Both "Plant Genus Loci" and "Happiness-Sorrowness Map" were cross-curricular projects that broadened our students' perspectives, sensitized them to environmental problems, developed their critical thinking and enabled them to think creatively when searching to solutions to problems sketched by other members.

Lessons learnt

What have we learnt from the experience with eTwinning? The first lesson we learnt is that it is important to be visible at the university and get recognition from the authorities and educators showing them the values of eTwinning. It was a very good decision to apply for the Gdańsk University Didactic Initiatives Program for an Educational Innovation Grant as it made it possible for us to make the first steps with eTwinning and was great assistance for four years. Another good decision was to start with local projects as they provided safe learning environment helping students and teachers acquire new skills and knowledge needed for project work before they move forward towards international collaboration. Also, the eTwinning Conferences proved to be a great success as they brought all the parties involved in project work together but primarily because they improved students' self-esteem giving them a feeling of achievement. We have also learnt that eTwinning projects are a great research tool that could be used by both teacher trainers and students.

7.2.2. STEP OUTSIDE – VISIT LOCAL SCHOOLS: ADAM MICKIEWICZ UNIVERSITY IN POZNAŃ

The need to change the education model

Nature is a network of various interactions between different organisms. The strength of those interactions and their effects change throughout time and space. The world that we live in is also a dynamic network of social, economic and cultural connections. Countless, small new interaction networks appear every microsecond; some of which we can be familiar with, as well as those that haven't been discovered yet. Such a picture of the world, in order to discover it and provide innovative solutions to local and global crises, requires a holistic education and not an education enclosed in separate subjects. However, in order for a holistic education to take place, a teacher is needed, who thinks not only in a linear but also in a network way. The switch from linear to network thinking in school education requires an appropriate preparation from a teacher. By observing students from the Kazimierz Nowak Elementary School in Dąbrówka and the work of their teacher – Tomasz Ordza (MA) –, we decided that we would introduce future biology teachers to the STEAM education model used in this school.

Why STEAM? Because this education model combines the knowledge of Science (S), Technology (T), Engineering (E), Art (A) and Maths (M). Thanks to the network of connections between knowledge and tools from various branches of science the students can observe/discover and interpret the world in a holistic way and not from the perspective of a single field of study (Perignat, Katz-Buonincontro, 2019). At the same time STEAM teaches openness to its users and is of great importance to the future of our society, which is currently living through a time of both local and global crises.

Curriculum integration

The Faculty of Biology at Adam Mickiewicz University in Poznań, for the first time in the academic year 2021-22 (with continuation in the following years), in the field of teaching biology and nature, implemented a new module for students: "STEAM and TIK in the international projects in the classroom". The realization of the module is planned to cover 45 hours, which includes four lectures, six conversation classes and also activities for the students at school. It was decided that the students — potential future teachers — will be educated in creating the ideas for STEAM projects and taught how to write and implement them with their pupils on the eTwinning platform. The main goals set in this module are as follows.

- I. Students (potential teachers) search for the interdisciplinary contexts in the core curriculum of both nature teaching and biology.
- 2. Students create an idea for an interdisciplinary project (formulate goals, select research methods, propose cooperation to teachers of other subjects and create a work schedule).
- 3. Students learn how to implement international projects into school documentation (regulations of the state's educational policy, school's preventive and educational program, class educational program, GDPR school documentation, curricula of individual subjects included in the STEAM project, academic year calendar).
- 4. Students learn about the action mechanisms and ICT tools of the eTwinning platform called "etwinning.pl".
- 5. Students analyse several STEAM projects awarded the European Quality Certificate, on the eTwinning platform "etwinning.pl" (a.k.a. "good practice").
- 6. Students learn how to use ICT tools, which are necessary for project implementation.
- 7. Students learn the basics of coding (e.g. Ozobot), 3D printing and creating AI technologies necessary for project implementation.
- 8. During the project, students learn about the techniques of distance education (communicating with international partners in real time).
- 9. In a group consisting of other pupils and teachers of selected subjects, students implement the educational project in the Kazimierz Nowak Elementary School in Dąbrówka.

The classes were conducted by a scientist and a teacher. It was of utmost importance to provide the students with a direct contact with a teacher-practitioner, whose work method was based on the STEAM projects and their realization on the eTwinning platform. This was a key point in the program offer – a live contact with the teacher –, which showed us that: 1. the core curriculum is not an obstacle in the implementation of interdisciplinary projects in school; 2. the education of tomorrow is the education based on relationships, which are built during the work in the STEAM project. The motto of the projects was "Climate change on planet Earth – what do I know about it & how can I prevent it". All of the student projects were heavily embedded in the current knowledge regarding climate change and its influence on flora, fauna and human beings. These were the following projects: "Corridors – opened doors for animal migration", "How to change the desert of roofs?", "Don't throw away irretrievably", "Hackers in the garden" and "Love is in the air".

Final reflections

We need explorers, who will provide new facts to explain, in the case of biology, structures, phenomena and mechanisms occurring in nature, as well as new tools and technologies to minimize the effects of human activity on our planet. It is required from all of the teachers on every education level, including the academics, to make a change in the education model from modus "to have" to modus "to be". Education, according to the modus "to be", is teaching thinking (scientific and bionic in the case of science), asking open questions, not collecting knowledge and the so-called "absolute truths", and as a result, getting to know the universe, life, people, and oneself more and more deeply. Working with students by using the STEAM project helps to see and interpret the world in a holistic way. In the STEAM projects the concepts, knowledge, information, tools and practical actions are not being isolated. The lack of that kind of isolation works in favour of the natural process of learning about and understanding the world by the students and the possibility of improving it by the broadly understood innovations. This is undoubtedly a challenge also for the academic teachers, like us, who are responsible for the education of the future school teachers. Some teachers in Poland already work in schools using the STEAM project method - an educational strategy based on relations between students and between teachers of various subjects, integrating the entire school community (students, parents, school staff). The teachers have often acquired the necessary competencies, in order to work with their students in the STEAM project, on their own. The eTwinning platform was and is helpful to them in accomplishing this goal. Now it is the turn of the universities to introduce science education based on STEAM projects, carried out on the international eTwinning platform into their education programs for future teachers.

7.2.3. SPREAD THE WINGS – GO INTERNATIONAL: THE UNIVERSITY OF LOWER SILESIA IN WROCŁAW

The University of Lower Silesia joined the community of eTwinning for Future Teachers in 2017. The TTI has been supervised by Dr. Barbara Muszyńska ever since. For the past five years, the university has taken measures to implement eTwinning projects within the methodology of English language teaching courses for pre-service primary school teachers. Our university students have been encouraged to participate in, but also plan their own international eTwinning projects and to take professional development courses offered by eTwinning Poland.

Curriculum integration and project implementation

In the spring of 2018, our first international eTwinning project together with Sopron University in Hungary, titled "K.I.D. Knowledge, Impressions, Differences of Early Childhood Education", was implemented. Its purpose was to familiarize students of the partner universities with theoretical, methodological and practical aspects of early language education in Poland and Hungary. The task of the students was to exchange knowledge and experience related to aspects of early childhood education using ICT. Students were to apply their knowledge and skills in practice. This was the first project for both partners, so we were together learning about the principles of eTwinning, the TwinSpace platform and project activities dedicated to students. The cooperation went exceptionally well, so in 2019 we implemented another project with the same partners. This time it was related to children's stories in English: "Storytelling as an educational method in lower primary school and kindergarten". Within the framework of joint activities, we dealt with the use of children's stories in English as educational materials in foreign language classes. The aim was to promote foreign language learning, enrich students' vocabulary, develop emotional intelligence and intercultural understanding in children. During the course of the project, the students developed a lot of very good quality materials that we decided to refer back to in 2021, when we conducted another eTwinning project, entitled "Teaching English Through Picturebooks - Creating a learning plan". This project was organized with partners from the University of Zagreb, Croatia and the University of Copenhagen in Denmark. A feature that was added in this project was a Zoom call. Students were divided into small groups of four and were asked to get in touch on the TwinSpace Forum (the groups were created on the Forum) and establish a time to meet and talk. There was one task, a piece of information they were to learn about, but the rest was up to them. The Zoom call was a huge success, some students called each other again. Therefore, we decided to keep this feature in our subsequent projects. What is worth mentioning, we, as academic teachers, have learned a great deal from one another during the planning phase of this project. That was a really valuable experience. In 2020, we implemented an excellent project with the University of Cordoba in Spain: "Learning English with Technology". More than 100

students participated, including undergraduate, graduate and postgraduate students studying courses in English language teaching methodology. We collaborated during the COVID-19 pandemic by connecting different groups of students – for some of them it was also a form of carrying out student internship. As a result, our project was characterized by a thematic diversity of tasks tailored to the year of study and learning outcomes. We started the activities by building relationships through interaction and sharing ideas. Students got really involved – there were more than 340 posts on TwinSpace. The evaluation conducted at the end of the project brought confirmation of the value of our activities: 94% of students improved their English language skills thanks to the project, 96% believe that they know how to choose well the appropriate educational materials from the sources offered, and 88% know how to plan and carry out activities for students based on online materials and tools (Huertas-Abril, Muszyńska,2022).

Once we gained some experience with eTwinning project set up, online tools, partner finding, and felt more confident, we decided to move beyond that and give more autonomy to pre-service teachers and have them design projects, which they would also implement with their pupils. This applied only to students who were already employed as teaching assistants at kindergarten or lower primary schools.

There is one unique example of our work that I would like to share. It refers to a small group of pre-service teachers studying Content and Language Integrated Learning (CLIL). Students worked on CLIL project planning for younger learners and decided to support it with an implementation of an eTwinning project. We collaboratively worked with CLIL pedagogies, the teaching module in mind, and with the idea of implementing an international eTwinning project with international partners. Students planned the whole learning module, including the materials to be used during the classes. Therefore, we decided to share these ideas and published an article in "The Teacher" magazine in Poland (Czekajło, Dybała, Muszyńska, 2021). Subsequently, the students conducted the project with their pupils and international partners successfully, applied for and got the European Language Label. By this stage, they were not my students anymore, but we decided to continue cooperating and took one more opportunity to share what we/they were doing, and gave a poster presentation at the World CLIL conference in Hague (online) in July 2022. It goes without saying that when learning and teaching become real and meaningful for the people involved, there is no stopping. I think we all wish for learning to go outside of classes and not be time framed, as in this example. I firmly believe that eTwinning can be a solid predictor for this happening.

Research outputs

In terms of the research outputs, which we moved onto in the last two years, we have least experience. However, we have managed to encourage pre-service teachers to write a few MA dissertations involving eTwinning projects that they would also conduct with their pupils in the process of writing, which required planning ahead of

time. These were indeed very good and promising, but can only be done by groups of students who work with pupils and have had an eTwinning training during their university course, as they need knowledge of eTwinning and the online tools used during project work. Therefore, we are aware of the fact that if there are to be more Master's theses on eTwinning, we need to increase the number of groups that have eTwinning projects as part of their university courses.

We have managed to publish three articles on the use of eTwinning, which is just a start. We have been involved in most of the conferences and seminars in Europe organized by eTwinning teacher training institutions and national agencies. One of the talks engaged our student who talked about the eTwinning project that was conducted at our university. This was a rewarding experience for all parties involved.

The aspirations we wish to achieve are certainly related to all of the areas described above, but especially to the last one. Nonetheless, we also need to consider eTwinning projects and their implementations on a curriculum level, on possibilities of linking them to students' internships. It is our intention to think of the project implementation also on national level. Opening discussions and cooperation between academic teachers across universities in Poland, learning from one another, would be of great value for the pre-service teachers too.

7.3 Conclusions

As demonstrated above, the integration of eTwinning projects within university courses has broadened the range of skills students acquire during the educational process. It has offered experiences that will certainly be applicable to student-teachers' future work with learners. Participation in eTwinning projects often provides motivation for students to later apply for Erasmus+ study or internship programs. This is especially true of students who break down their language barriers in a foreign language thanks to the opportunities for authentic communication with students from other European universities. Seeing that their colleagues who are also not native speakers of the foreign language they are learning, face similar difficulties when learning a language, helps them to gain more confidence when communicating with others. We have observed at our universities that when students gain this confidence early in their studies, they are generally more willing to take up eTwinning initiatives as part of their MA dissertations and later in their work with students.

eTwinning initiatives connecting different faculties at one university, for instance, subject pre-service teachers with students of foreign language philologies have proved immensely valuable for the university academic staff, bringing new connections across faculties, and students, who have had opportunities to get to know one another and cooperate across disciplines. Another action that has built bridges across sectors of education was, described by the University of Gdańsk, the conference that welcomed all

parties involved in eTwinning projects, from schools to universities. In the following years, we plan to expand this initiative and go hybrid to allow other initial training institutions in Poland to connect and share project ideas and learn from our experiences.

Professional development is another important factor that determines the value of the eTwinning initiative at universities on two levels, academic and student one. From the perspective of an academic teacher, the realization of long-term international cooperation allows to gain new teaching skills and insights from colleagues at foreign universities. As for students, the online courses provided by eTwinning Poland that pre-service teachers were allowed to take, open access to high quality professional development for teachers. Students are eligible to one course per semester, they can choose a course that interests them, there are no restrictions. The courses are offered free of charge and a certificate is issued on completion.

The eTwinning National Office in Poland has built a large network of ambassadors who have been a great support to the universities and whose work should not go unnoticed. They provide support to universities and play an important role in project implementation.

The future of higher education requires better alignment between learning environment and the workplace, schools. It seems that eTwinning projects allow us to do just that, and are a way of addressing various curricular issues, lead to greater inclusion, and provide effective strategies to customize learning for student needs.

There are many routes ITE teachers can take in their work on eTwinning projects. Some are smooth some more bumpy but any road is good if it leads to the final destination – successful eTwinning project implementation. And we, teacher trainers from the Polish universities in Gdańsk, Poznań and Wrocław, all managed to find our unique road to this place.

References

CZEKAJŁO A., DYBAŁA J., MUSZYŃSKA B. (2021), Content and Language Integrated Learning (CLIL) Module Supported by the Implementation of an eTwinning Project, in "The Teacher", 11-12, 186, pp. 43-52.

HUERTAS-ABRIL C., MUSZYŃSKA B. (2022), The Role of eTwinning Tools in Social and Curriculum Integration Using Multimodal Communication, in "Teaching English with Technology", 22, 3-4, pp. 69-89.

PERIGNAT E., KATZ-BUONINCONTRO J. (2019), STEAM in Practice and Research: An Integrative Literature Review, in "Thinking Skills and Creativity", 31, pp. 31-43.

eTwinning and ITE in Spain A testimony by Universidad de Castilla La Mancha

by Isabel López Cirugeda and Raquel Sánchez Ruiz*

Initial Teacher Education is a fascinating task which in Spain, as well as in other surrounding countries, is currently facing many challenges due to social, demographic, economic, methodological, and legal change in compulsory education. This has diversified the educational offer to comply with the new demands by means of updated initial training and lifelong learning, as it is understood teachers, as well as other professionals, will need to learn new skills during their whole career. On the one hand, initial training is understood as the minimum official instruction required before entering working life. More specifically, in order to address their job, teachers of early childhood and primary education must necessarily hold a Degree in teaching those stages in Spain¹, and secondary teachers must course any Degree plus a Master's Degree in Secondary Education Teaching². Early childhood, primary, and secondary education teachers must then undergo a selective process in order to work permanently in State-owned schools. On the other hand, lifelong learning, understood as the recommended, permanent acquisition of «key competences needed for personal fulfilment, health, employability and social inclusion» (Council of the European Union, 2018), though not strictly necessary, is becoming more and more common among teachers, who receive compensation for their mobility or for their inner promotion apart for the training itself.

Today, most of the undertaken teaching tasks, even when seemingly positive and stimulating, if we think of CLIL and plurilingualism, to name an example, also seem arduous due to the needs for teachers to adapt to new situations and guide the acquisition of the XXI century skills without having been quite properly trained themselves.

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^{1.} Real Decreto 132/2010, de 12 de febrero, por el que se establecen los requisitos mínimos de los centros que impartan las enseñanzas del segundo ciclo de la educación infantil, la educación primaria y la educación secundaria.

^{2.} Real Decreto 860/2010, de 2 de julio, por el que se regulan las condiciones de formación inicial del profesorado de los centros privados para ejercer la docencia en las enseñanzas de educación secundaria obligatoria o de bachillerato.

Teaching posts and emerging policies also imply handling increasingly demanding therapeutical techniques so as to address inclusion. Some other present circumstances, as the recurrently growing pupil-teacher ratios, relate to shortage of human and material resources and are openly discouraging. How can new teachers be trained without a wide social consensus regarding methodology, contents, or even values, without due social recognition, with controversial figures of teacher demand and supply, and out in a context where artificial intelligence contributions are frequently misinterpreted as robots taking over teachers in the near future?

In the midst of all this uncertainty, teacher trainers lean upon references to help them build a coherent framework, the ones underlying national legislations, which in fact are shared by different countries and happen to provide an international ground for Education. Take, for example, Gardner's theory of multiple intelligences (Gardner, 1983), the Common European Framework of Reference for Languages (CEFR; Council of Europe, 2001), the different frameworks of digital competences, such as the European Framework for the Digital Competence of Educators: DigCompEdu (Punie, Redecker, 2017), the United Nations' Sustainable Development Goal number 43, or the recent popularity of the Universal Design for Learning applied to education (CAST, 2011), included in the new Spanish Education Law LOMLOE4, to see how all of them have influenced modern education in a worldwide scale. The entrance into the European higher education area more than a decade ago meant the reinforcement of this common, international foundation, and also a move towards professionalization of teachers' work (Sancho-Gil, Sánchez-Valero, Domingo-Coscollola, 2017).

8.1 eTwinning for XXI century education

Despite all this confluency among policy makers, it is day-to-day work that actually creates synergy among teachers, and that is what the European Commission searches for in eTwinning. Originally launched in 2004 to support the first generation of European educational programmes, E-learning (2003-05), the platform eTwinning has ever since been providing the scenario for international teacher designed, teacher implemented projects for compulsory education. eTwinning provides a user-friendly, safe environment for international project-based learning. It has involved over a million teachers around 43 countries of the European context and its surroundings, and more than 200,000 schools in more than 100,000 projects so far. Within its deep-routed pro-European activism, Spain has taken an important role into it with 87,589 teachers, 33,751 projects, and 17,730 schools up to September 2022.

^{3.} https://www.un.org/sustainabledevelopment/es/education/.

^{4.} Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación (LOMLOE).

eTwinning projects naturally train into XXI century skills in many ways. Plurilingualism and interculturalism are consistently perceived as assets, which finds for engagement of immigrant born or raised pupils, builds cohesion for the class, and grants free opportunities for internationalisation at home. It provides all parties implied – also known as *eTwinners* – with consistent innovation practices based on ICT resources – as distance obliges partners to handle them at all times –, and therefore constitutes a creative laboratory for digital literacy and further practice. If we take the Spanish Digital Framework for Teachers (INTEF, 2017; 2022), eTwinning helps cover all six existing areas: 1. professional deontology, including digital safety and digital health; 2. searching and sharing digital content; 3. use of digital technology in teaching and learning; 4. use of digital strategies for evaluation and feedback; 5. student empowerment and inclusion; 6. development of student digital competence. This competence is regularly self-assessed as poor by newly qualified teachers (Gudmundsdottir, Hatlevik, 2018), so it must be a priority for initial training.

It also brings opportunities for appreciation of local and foreign culture, artistic skills – both plastic and performative –, environmental friendliness and sustainability, as they all appear as regular parts of eTwinning projects. Their design relies on the task-based approach, recommended by the CEFR for the learning of foreign languages (Council of Europe, 2001), with both real life and pedagogic tasks, cooperative work, and learning situations. As stated by Licht, Pateraki and Scimeca (2020), students in eTwinning schools are called to be *agents of change*. And teacher students, if trained into the platform, get the chance to work first hand with these methodologies and get the experience required to include projects as a part of the syllabus and lead their colleagues into eTwinning when they get to work in schools.

8.2 The Teacher Training Pilot/Initiative for pre-service teachers

In this context, the Teacher Training Pilot appeared in 2013 as an opportunity to take advantage of initial training to provide these tools and skills to use and insert eTwinning into syllabuses. This way, eTwinning was offered for the first time to universities. Spain joined the programme on its first edition with three institutions, namely Universidad de Castilla-La Mancha, Universidad Rey Juan Carlos and Universidad del País Vasco. It was the former that actively participated to explain how student teachers of the Faculty of Education in Albacete were already receiving eTwinning instruction in the training platform⁵, open to every citizen, and with similar functions to the official one. Thus, the requirement of being an in-service teacher could be skipped, and students could register, find each other and design

^{5.} The eTwinning training platform (www.training-platform.net) is no longer working after the transition to ESEP (European School Education Platform).

projects together. The pilot provided the conditions to meet other trainers and practitioners around Europe, which dramatically boosted implication on this training, and it was soon explained and applied in nearly every English course of the 4 year Degrees in Early Childhood and Primary Education and in the Master's Degree in Secondary Education, and the Master's Degree in Educational Research and Innovation, together with additional ambassador training, became a regular topic for end of BA and MA dissertations, and the perfect complement to service-learning experiences in pre-primary and primary education ever since (López Cirugeda, 2017) and was well-grounded by the time the pilot turned into the Teacher Training Initiative in 2017. Moreover, the institution made a reform of academic syllabuses of both degrees in which eTwinning and service-learning projects could be included as a regular part of the evaluation for such courses. Initial teacher training projects have favoured strategic international partnerships and work alliances for research and mobility, and fostered soft skills, which ends in better motivation and academic performance for pre-service teachers (Paz-Albo, López Cirugeda, 2017). Furthermore, the digital format has conveniently helped to face the challenges provoked by the lockdown situations due to the COVID-19 pandemic (Servicio Nacional de Apoyo eTwinning, INTEF, 2021).

Now that the initiative is expanding among all higher education institutions training teachers in Spain thanks to the National Support Service (www.etwinning.es), a few words from experience may help new eTwinners.

- Keep it simple. Do not overload your students and yourselves with new tasks. Make use of your strengths and share the kind of projects you were already doing in class.
- Failure is a part of success. Perfect match partners are rare to find. High expectations and crowded agendas do not make it any easier and can quickly lead to discouragement. However, it really pays to insist, as the results are what students ask for: real life and pedagogical tasks such as the ones they may design and implement in the future. It is also good for them to experience now the problems they will find in their job.
- Ask for help. You can do anything, but just not everything. The Regional and National Support Services know best and are willing to ease the process.
- Meet the neighbours. Listen to the others. You may be surprised at what they can offer you, and they will hopefully be interested in what you do, too. And, even if many of the teacher training projects initially refer to the differences in culture and/or the educational systems, evidences of the common background for teaching practice are likely to arise during the project. We are on the same business.
- *Enjoy!* Despite time pressure, do not forget that, after all, the project is supposed to be a celebration of Europe, and the joys of teaching as a profession. Reorient complaining students towards professionalising international work. Plan some festive hallmarks, especially at the end of the journey.

Spain has contributed with the initiative both in the annual national and international events, and in numerous online seminars, as well as in educational international

conferences and symposiums. Student teachers have recently got official access to the platform and the European School Education Gateway, which enables real opportunities for practice and the use of a forum to meet and work on their own. Projects with pre-service teachers have led to the publication of some international papers (Muszynska, Huertas Abril, 2020; Jeong, Sánchez Ruiz, Wilhelmsson, 2022). Not surprisingly, on a national scale, eTwinning has become a subject of interest for some educational research, and that includes doctoral work with the platform as the main topic (Ruiz Pérez, 2010; March Blasco, 2011; Miñarro López, 2019; Vargas Gil, 2020), or as the virtual space chosen to carry out their doctoral research (Miguel Vallés, 2017). The introduction of every teacher training institution will surely contribute to the spread of papers on good practices and hopefully some in-depth conclusions that may guide processes in the future.

8.3 Conclusions

The eTwinning Teacher Training Initiative, former Teacher Training Pilot, has been gathering since 2015 different teacher training institutions from the member countries – which are 43 in 2022 – in order to foster eTwinning training among pre-service teachers. In Universidad de Castilla-La Mancha, the previous initial experience consisting of student teachers getting registered and designing a project together grew exponentially after joining the initial group of institutions, which originated the transformation of the courses by the Department of Modern Languages.

Today, the initiative has been joined by most of the national institutions, thus providing ground not only for up-to-date teacher training, but also for international mobility and research, and making new generations of teachers ready to lead the change for XXI century schools and growth of the European dimension for a sustainable, inclusive and digital competent society.

References

CAST (2011), *Universal Design for Learning Guidelines Version 2.0*, https://udlguidelines.cast.org/binaries/content/assets/udlguidelines/udlg-v2-0/udlg_graphicorganizer_v2-0.pdf.

COUNCIL OF EUROPE (2001), Common European Framework of Reference for Languages: Learning, Teaching, Assessment, Cambridge University Press, Cambridge.

COUNCIL OF THE EUROPEAN UNION (2018), Council Recommendation of 22 May 2018 on Key Competences for Lifelong Learning (Text with EEA Relevance), Official Journal of the European Union, C 189.

GARDNER H. (1983), Frames of Mind: The Theory of Multiple Intelligences, Basic Books, New York.

GUDMUNDSDOTTIR G. B., HATLEVIK O. E. (2018), Newly Qualified Teachers' Professional Di-

- gital Competence: Implications for Teacher Education, in "European Journal of Teacher Education", 41, 2, pp. 214-31.
- INTEF (2017), *Marco común de competencia digital docente*, Ministerio de Educación, cultura y deporte, Madrid (https://aprende.intef.es/sites/default/files/2018-05/2017_1020_Marco-Com%C3%BAn-de-Competencia-Digital-Docente.pdf).
- ID. (2022), Marco de referencia de la competencia digital docente actualizado, https://intef.es/wp-content/uploads/2022/03/MRCDD_V06B_GTTA.pdf.
- JEONG H., SÁNCHEZ RUIZ R., WILHELMSSON G. (2022), Spanish and Swedish Pre-Service Teachers' ELF User Attitudes Towards English and Its Users, in "Changing English: Studies in Culture and Education", 29, 2, pp. 189-201.
- LICHT A. H., PATERAKI I., SCIMECA S. (2020), eTwinning Schools: Towards a Shared Leadership Approach: Quantitative and Qualitative Analysis of the eTwinning School Practices, Central Support Service of eTwinning, European Schoolnet, Brussels.
- LÓPEZ CIRUGEDA I. (2017), eTwinning en los Grados de Maestro y Máster de Formación de Profesorado de Secundaria de la UCLM, in R. Cózar Gutiérrez, M. del Valle de Moya Martínez, (coords.), Entornos humanos digitalizados. Experiencias TIC en escenarios educativos, Síntesis, Madrid, pp. 67-80.
- MARCH BLASCO M. L. (2011), eTwinning y competencias básicas en la Unión Europea, Tesis doctoral, Universidad Nacional de Educación a Distancia.
- MIGUEL VALLÉS E. DE (2017), El desarrollo de la competencia intercultural de estudiantes en educación secundaria. Un proyecto eTwinning de colaboración virtual, Tesis doctoral, Universidad Autónoma de Madrid.
- MIÑARRO LÓPEZ L. M. (2019), eTwinning como programa de éxito en la escuela del siglo XXI. Alcance, limitaciones y oportunidades, Tesis doctoral, Universidad de Castilla-La Mancha.
- MUSZYNSKA B., HUERTAS ABRIL C. (2020), *eTwinning*, in "English Teaching Professional", 131, pp. 52-3.
- PAZ-ALBO P. J., LÓPEZ CIRUGEDA I. (2017), Higher Education Perspectives on eTwinning: The Future of Initial Teacher Training Learning, in INTED2017, Proceedings of the 11th International Technology, Education and Development Conference (Valencia, Spain, 6-8 March), IATED Academy, pp. 1073-6.
- PUNIE Y., REDECKER C. (eds.) (2017), European Framework for the Digital Competence of Educators: DigCompEdu, Publications Office of the European Union, Luxembourg (https://publications.jrc.ec.europa.eu/repository/handle/JRC107466).
- RUIZ PÉREZ F. J. (2010), Análisis y evaluación de la plataforma virtual colaborativa eTwinning y su relación con la generación de valores y actitudes del alumnado, Tesis doctoral, Universidad Complutense de Madrid.
- SANCHO-GIL J. M., SÁNCHEZ-VALERO J.-A., DOMINGO-COSCOLLOLA M. (2017), Research-based Insights on Initial Teacher Education in Spain, in "European Journal of Teacher Education", 40, 3, pp. 310-25.
- SERVICIO NACIONAL DE APOYO ETWINNING, INTEF (2021), eTwinning y la transformación digital educative, in "e-CO. Revista digital de educación y formación del profesorado", 18 (http://revistaeco.cepcordoba.es/wp-content/uploads/2021/04/Bang.pdf).
- VARGAS GIL E. (2020), Modelos de colaboración docente en red para el área de Música. Un análisis de los proyectos eTwinning en el periodo 2008-2018, Tesis doctoral, Universidad de Castilla-La Mancha.

eTwinning and ITE in Türkiye

by Mehmet Fatih Döğer, Hülya Bal and Ümit İzgi Onbaşılı*

9.1 Education and eTwinning in a changing world

Education constitutes the core focus of the United Nations Educational, Scientific and Cultural Organization (UNESCO), a body dedicated to fostering global peace, eradicating poverty, and facilitating sustainable development on a worldwide scale (UNESCO, 2022). Within its priorities lies a keen interest in aspects like educators' qualifications, their numerical sufficiency, and their employment status. With this objective in mind, UNESCO introduced the ICT Competency Framework for Teachers in 2008, aiming to establish a uniform benchmark for instructors' adeptness in the realm of Information and Communication Technology (ICT). Concurrently, the United Nations set forth the Sustainable Development Goals for 2030 during the UN Sustainable Development Summit in 2015. These goals provide governmental guidance in steering educational aspirations and converting commitments into tangible actions (UNESCO, 2021a). The strategies for realizing the Sustainable Development Goal evidently seek a substantial elevation in the number of qualified educators, particularly within developing nations, by the year 2030. International collaboration for enhancing teacher education stands as a pivotal facet of this endeavour (UNESCO, 2021b).

In 2006, the European Parliament and the Council of the European Union jointly issued a recommendation concerning pivotal competences for lifelong learning. Member States were thereby enjoined to cultivate these essential competences universally, utilizing the Key Competences for Lifelong Learning – European Framework of Reference. Since the adoption of this recommendation, it has been the foremost point of reference for structuring education, training and learning around competences. Consequently, a premium has been placed on investing in fundamental proficiencies, while also accentuating the value of extracurricular undertakings. It has been asserted that in response to evolving global circumstances, the employment of digital technologies can engender ad-

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aptable learning environments in harmony with societal requisites, thereby significantly influencing the sphere of education (Council of the European Union, 2018a).

In alignment with these ongoing advancements, the Ministry of National Education (*Milli Eğitim Bakanlığı*, MEB) in 2018 seamlessly incorporated personal, social, academic skills, and competencies into the curricula of elementary, secondary and high schools. This strategic integration, meticulously aligned with the European Qualifications Framework, serves to equip students with the multifaceted proficiencies essential for their future careers, both on the domestic and global stages. Within the Turkish educational context, the overarching objective centres on nurturing individuals endowed with a synthesis of knowledge, skills and behaviours that seamlessly coalesce (Council of the European Union, 2018b).

Simultaneously, the advent of the eTwinning initiative in 2005, as a cornerstone movement within the European Commission's e-Learning Program, has garnered widespread attention across the European landscape. This program, underpinned by the European Union's conception of Key Competencies, aptly acknowledges the diverse array of national frameworks that bear substantial reliance on the specific circumstances and cultural *milieu* of each sovereign nation, alongside the presence of assorted international frameworks. Notably, eTwinning has facilitated the creation of projects within a virtual sphere, transcending geographical distances between participating nations. Since 2007, eTwinning has been seamlessly integrated into the Lifelong Learning Program, overseen by the European Schoolnet. This orchestrates a collaborative effort engaging 44 countries and 34 European Ministries of Education, ultimately dedicated to fostering educational progress for schools, educators, and students across the European panorama.

eTwinning serving as a collaborative platform, a concerted effort of educators, student teachers, students and teacher educators converge with the aim of co-constructing the "future's quality education system". This collective endeavour takes on special significance as eTwinning enables members, particularly teacher educators, to contribute to the professional growth of student teachers. In this light, it becomes imperative to investigate and deliberate upon the evolution of eTwinning in Europe, its transformative influence on the professional advancement of educators, its role in fostering pedagogical innovations, and the pronounced relevance of XXI century skills especially for burgeoning student teachers.

9.2 Why the ITE is important for the education system?

The collaboration between universities and schools is vital for creating a cohesive and effective educational ecosystem. It benefits students, educators, institutions, and society as a whole by promoting a seamless educational journey, fostering innovation, and preparing students for success in both their academic and professional lives. The

collaboration between universities and schools is of paramount importance for several reasons. This collaboration not only benefits students but also contributes to the overall development of education systems and society as a whole. Here are some key reasons highlighting the importance of collaboration between universities and schools:

- collaborating ensures a smoother transition for students from the K-12 system to higher education. Universities and schools can align their curricula, teaching methods, and learning objectives, reducing the gaps between different educational levels;
- collaboration allows universities and schools to develop a curriculum that is relevant, up-to-date, and in line with the needs of the students. Universities can provide insights into the skills and knowledge required for various disciplines, helping schools to better prepare students for higher education and beyond;
- teachers and educators benefit from collaborations with university professors and researchers. They can gain access to the latest teaching methods, research findings, and best practices. This enhances their teaching skills and keeps them updated with the latest educational trends;
- collaborations between universities and schools provide avenues for conducting research in real-world educational settings. This research can lead to innovations in teaching methodologies, learning materials, and educational technology, ultimately improving the quality of education;
- university professionals, such as professors and researchers, can visit schools to give talks, workshops, and demonstrations. This exposure to experts in various fields can inspire students, foster a passion for learning, and show them the practical applications of their studies;
- universities often have access to resources such as libraries, laboratories, and advanced technology that schools may lack. Collaborations can facilitate resource sharing, giving school students and teachers access to tools that enhance their learning and teaching experiences;
- collaborative efforts can extend beyond the classroom to involve parents, local communities, and businesses. This creates a holistic approach to education, where everyone works together to provide students with a well-rounded learning experience that connects classroom learning to real-world applications;
- collaboration can help identify and address challenges faced by both schools and universities. By working together, institutions can pool their expertise to find solutions to common problems such as student retention, learning gaps, and teacher shortages.

9.3 The eTwinning Action

The eTwinning Action, aimed at creating a secure web-based network for teachers, enables collaboration among European teachers and their students. Its purpose is to

enhance personal and professional development by actively engaging teachers who utilize technology in multifaceted ways for teaching, with a focus on promoting collaboration between schools. eTwinning functions as a digital platform where schools collaborate, and teachers engage in both synchronous and asynchronous methods to conduct projects, fostering a learning and teaching environment (eTwinning, 2022). The inception of eTwinning as a teacher-oriented platform aims to establish a social network that facilitates school collaboration through the utilization of technology. This initiative is carried out under the Ministry of National Education's General Directorate of Innovation and Educational Technologies. Teachers are encouraged to integrate technology into their classrooms, align content with curricula, and employ innovative teaching methods and techniques (Doger, 2015).

eTwinning activities began in Türkiye in 2009 and have become one of the Ministry of National Education's most sustainable endeavours. As of September 2022, Türkiye holds one of the top positions in terms of both quantitative and qualitative statistics among the 44 countries participating in this initiative. In this context, out of 417,202 projects, 61,105 (14%) are from Türkiye, along with 1,028,934 teachers (32%), 218,741 schools (25%), and 2,841 of the 5,074 eTwinning schools (55%) (Doger, 2023).

According to data from Google Scholar, 7,790 scholarly publications have been produced under the eTwinning initiative, with 276 of them in Turkish. These research studies indicate that the initiative leads to the development of teachers' and students' competencies in using information technologies, improvement in digital literacy and foreign language skills, increased social skills and motivation through collaboration with peers, and learning and application of various methods and techniques for professional development. Ultimately, this process leads to enhanced success for students in their lessons and social lives. Furthermore, eTwinning serves as an important tool for enhancing students' self-expression, communication in native and foreign languages, entrepreneurial skills, mathematical abilities in science and technology, and the development of social and civic competencies, as well as increasing children's awareness, as indicated by the outcomes of these scholarly publications (Doger, 2022).

9.4 Activities within the scope of eTwinning ITE

Within the framework of eTwinning Initial Teacher Education (ITE) in Türkiye, various activities have taken root. Türkiye became part of the eTwinning platform in 2009, and the eTwinning National Support Organization (NSO) functions under the General Directorate of Innovation and Educational Technologies within the Ministry of National Education (MEB). The integration of eTwinning activities into faculties of education at universities commenced as part of the broader European eTwinning ITE initiative in 2012. Subsequently, Türkiye embarked on a pilot

implementation of ITE in 2019. As of August 2023, in the ITE initiative, 193 academicians from 63 universities across 47 provinces collaborate to enhance teachers' technological skills before entering the service. This endeavour is supported by 1,617 prospective teachers in Türkiye.

The inception of ITE in Türkiye's educational landscape, inaugurated through the pilot program in 2019, was accompanied by workshops conducted by the NSO. These workshops illuminated pathways for both teacher educators and student teachers to effectively engage into the ITE process. As part of the eTwinning ITE initiative, the eTwinning National Teacher Training Initiative Workshop took place from 4 to 6 April 2019. Situated within the precincts of Afyonkarahisar, this workshop welcomed the participation of 22 teacher educators hailing from 16 diverse universities, representing 11 distinct academic disciplines.

Apart from this event, during the period spanning 24 to 26 November 2020, a cadre of five erudite teacher educators partook in the eTwinning Teacher Training Institution Thematic Conference, a virtual event moderated by the Central Support Service. This professional development undertaking entailed a focused exploration into the intricate theme of climate change, along with the intricate web of environmental challenges that have germinated as a consequence of this phenomenon. Mandated with the task of probing this subject matter, the teacher educators were enjoined to conduct rigorous research and subsequently make projects in this pressing topic. In the course of this training, the criticality of concerted endeavours during the pandemic epoch was underscored, underscoring the indispensability of collaborative strides amidst the prevailing global health crisis. Additionally, the participating educators were duly apprised of the imminent launch in December of two pivotal initiatives, intrinsically embedded within the broader EU strategy: the European Green Deal and the European Climate Pact. The importance of these initiatives resonates within the context of nurturing a sustainable and environmentally conscious future for the European landscape.

As a part of the eTwinning ITE initiative, a selected group of four accomplished teacher educators took part in the "Ambassadors Workshop" held in Antalya from 3 to 5 June 2021. Throughout the ITE initiative, these teacher educators were presented with a unique opportunity to connect with their peers who also hold membership within the eTwinning portal. These professionals facilitated collaborative endeavours and the seamless execution of joint projects. Moreover, it provided a platform to interact with teams aligned with the eTwinning NSO, fostering a deeper appreciation for the cooperative efforts in place.

The impact of this engagement extended beyond the workshop's physical confines. Teacher educators, invited as instructors in the webinars moderated by ambassadors, vocalized their satisfaction with the process. This attests meaningful insights exchanged. The sentiment expressed by these educators further underscores the efficacy of the collaborative learning model cultivated within the eTwinning framework.

Apart from these, as an integral facet of the eTwinning ITE framework, a workshop centred around "Initial Teacher Education (ITE)" was organized in Trabzon, Türkiye, from 25 to 27 August 2021. A distinguished cohort, comprising 39 luminaries encompassing teacher educators, ambassadors, representatives from the NSO, and authoritative figures from the MEB, converged to partake in this dynamic event. The workshop encapsulated a profound exchange of wisdom, wherein teacher educators, steeped in their eTwinning odysseys, imparted their experiences on a similar journey. Ambassadors, steeped in their domain, played a pivotal role by shepherding the teacher educators through the intricate terrain of the eTwinning lifecycle. Of particular note were fervent deliberations regarding the cultivation of XXI century skills, alongside the nuanced art of equipping prospective educators with enhanced aptitudes, aligned with the comprehensive ambit of European teaching competencies. The workshop's extended beyond its temporal span, fostering the interwoven relationships. Online dialogues unfolded among teacher educators, serving as an exploratory vehicle to scrutinize sample projects. The collaborative spirit kindled during the workshop catalysed ambitious endeavours that surpassed its immediate bounds. Evidently, numerous teacher educators, who coalesced in this learning process, embarked on joint pursuits, initiating Master's theses in conjunction with their student teachers and co-authoring research articles. This collective endeavour supported the academic landscape with an imminent projection pointing towards a notable upsurge in the number of Master's theses dedicated to the eTwinning by the culmination of the academic year 2023-24.

In 2021, online meetings were organized under the moderation of NSO. NSO informed teacher educators about the studies to be carried out for student teachers. During the ITE process, teacher educators were invited to the eTwinning for Future Teachers Group so they would be instantly informed about the announcements in the group. Sample project information were uploaded to the group to the benefit of the novice teacher educator by more experienced ones, who work in countries that started the ITE process earlier. New projects have been initiated in the group in cooperation with teacher educators in Europe.

Other than this, 12 teacher educators from Türkiye participated in the eTwinning ambassadors' course, which was conducted online by the Central Support Service (CSS) from 16 to 17 December 2021. The course organizers emphasized that eTwinning ambassadors are the main pillars of the eTwinning community and they encouraged ITE ambassadors to start working to spread eTwinning by collaborating with other teacher educators in education faculties. During the course period, teacher educators were asked to organize online or onsite trainings to student teachers and lead the planned progress of ITE initiation.

In addition to these events, an ITE Conference was held online on 8-10 December 2021. 13 teacher educators from Türkiye participated in the conference. The ITE Conference gathered novice and experienced ITE members, helped to increase the motivation of teacher educators and discussed the future development of student

teachers in eTwinning, increased the recognition of ITE and fostered the beginning of new active projects etc. In the panel discussion moderated by Rute Baptista from the CSS, the challenges and the promises experienced by student teachers, and the preparation of future teachers for the new normal were discussed. Within the scope of ITE in Türkiye, Richard Powers (Stuttgart-Ludwigsburg Vocational School, Germany), Elif Gülbay and Ilenia Ingargiola (Università degli Studi di Palermo, Italy) provided explanations about the project which was founded by Assoc. Prof. Dr. Ümit İzgi Onbaşılı from Mersin University and Assoc. Prof. Dr. Burcu Sezginsoy Şeker from Balıkesir University.

9.5 Events held at universities within the scope of ITE

In terms of disseminating eTwinning in the faculties of education in universities and reaching to student teachers before they start their profession, the ITE initiative has been emphasized by teacher educators. In many universities in Türkiye, the information obtained from face-to-face seminars held within the scope of ITE was also shared with student teachers (eTwinning, 2022). In conclusion, it was found appropriate to conduct more case studies. In addition to the fact that student teachers contribute to many areas such as professional development, developing XXI century skills, and capability to cooperate, it has been observed that the sense of belonging to the eTwinning community comes to the fore.

eTwinning is a portal where teachers, schools, and ministries can observe the teacher training systems in different countries more closely and experience the reflections of different cultures on education. While teaching in Europe, student teachers can meet with student teachers in other countries and carry out common projects in the future. Teacher educators shared that the "Student Teacher" section carries currently comparatively a more important position in eTwinning and qualified studies are required related to this part of the portal. Teacher educators concluded that there is a need to support this new formation in the best way with research.

Teacher educators who have been members of the portal in Türkiye since 2019 organized informational seminars for student teachers about eTwinning in their courses after the training conducted by NSO. Student teachers stated that they were enlightened about eTwinning thanks to these seminars. Experienced eTwinners and ambassadors were invited to courses in education faculties and student teachers were informed. Mersin ambassador Bircan Keleş shared her knowledge about the portal. Information related to how to use educational technologies in lessons was provided with face-to-face training by Kenan Çete, who works as a teacher in Mersin. Face-to-face to training was given to student teachers on topics such as the use and inclusion of Web 2.0 tools in new courses. Student teachers were kindly invited to become a member of the portal and it was suggested that they should

also be a member of the eTwinning Student Teachers Group which is especially for student teachers.

After the workshop, within the studies carried out in cooperation, teacher educators delivered informative presentations to prospective teachers, primarily on topics such as the eTwinning portal and project process. Teacher educators participated in online ITE partner-finding fairs, learning events and online seminars. It provided the opportunity for their students to cooperate with other student teachers from other countries and to discuss about their current curricula; thus, the existing knowledge was increased. With the increasing interest in the use of educational technologies during the pandemic period, there was an increase in online museum courses, and trainings concerning creating awareness of nature, cooperation with teacher candidates in different cities, and project preparation workshop. The process of the Teacher Training Initiative (TTI) conducted by the Central Support Service was converted to the ITE format in 2021. In addition, ambassadors and teacher educators with relevant expertise provided online training sessions together to enhance the awareness of student teachers of current issues such as climate change and training sessions. In these trainings, it was noticed that the student teachers had limited knowledge about digital skills and were anxious about how to use digital tools in projects.

When the pandemic restrictions were abolished, teacher educators first conducted situation analyses in order to integrate eTwinning into the existing courses at the faculties of education. The curricula of universities in Türkiye are determined by specific board decisions and under the supervision of higher education institutions throughout the country. For this reason, changes to the curriculum have to be made by obtaining various official permissions. In this context, the opinions of the student teachers in the department of Classroom Teaching at Mersin University were obtained. The most remarkable of these opinions was that they want training such as mastering the methodology in their field and being able to use digital educational technologies effectively. With the newly opened elective course "Integration of Technological Based Applications in Education, which was launched based on the co-decision of the teacher educators, student teachers were given information about the eTwinning portal and Web 2.0 tools that they can use in eTwinning projects. The ambassador of Mersin was invited to the courses. A question-and-answer session was held about how the current teachers carried out eTwinning projects in accordance with the acquisitions in their courses. They were very happy that they could use the theoretical information they learned in the project lessons practically in the projects they would open on the portal. In addition to the teaching activities carried out in the classroom in order to improve the communication skills of student teachers in a foreign language, it was important to be able to reach and communicate with educational platforms in different cultures by supporting these studies with pedagogy and subject matter knowledge.

Graduate student teachers in Türkiye often enrol in the same courses at the

Master's level. Interestingly, some teachers continue to pursue identical courses even after commencing their professional careers. Among these educators, there is a notable subgroup engaged in eTwinning projects. They articulate their intention to enhance the calibre of their projects by addressing their pedagogical gaps through coursework. These educators, belonging to a technologically inclined new generation, assert their proficiency in leveraging technology effectively for their professional growth. Furthermore, they underscore the salutary impact of incorporating educational technologies into the teaching process. This integration not only heightened the quality of language instruction but also underscored the intrinsic importance of language learning itself. Teacher educators, deeply involved in the eTwinning training process, assert an intriguing observation. They noted that the eTwinning initiative motivated its ambassadors to pursue a Master's Degree. This phenomenon signifies the substantial impact of eTwinning involvement, compelling individuals to seek further academic enrichment and professional development opportunities.

Students who graduate from Education faculties can be appointed by taking a national exam and if they are successful, they are supposed to participate in an interview. There is no obligation to write a Master's thesis to graduate from education faculties in Türkiye. Doing a Master's Degree is optional. Many teachers who started their profession, and especially the teachers who have been conducting eTwinning activities in recent years, tend to apply to universities to get a Master's Degree in order to further develop themselves pedagogically. Many teachers who conduct an eTwinning project want to study eTwinning in more depth in their Master's thesis. This desire is clearly visible in graduate interviews. As of September 2022, there are 5 Master's theses completed in the Faculties of Education of universities related to eTwinning in Türkiye. These theses are as follows: *The contribution of eTwinning project practices* upon students' foreign language skills and the development of teaching profession: An action research (2018), Multi-dimensional foreign language education: The case of an eTwinning project (2019), Examination of emergency distance education processes of preschool teachers with and without eTwinning (2021), Review of class teacher's opinions about eTwinning (2021), Examination of emergency distance education processes of preschool teachers with and without eTwinning (2021). In 2022, one Master's thesis titled The contribution of the studies carried out in eTwinning schools to the school culture was completed.

9.6 eTwinning projects carried out in some universities within the scope of ITE

eTwinning projects were initiated with volunteer student teachers under the guidance of teacher educators in Mersin. Student teachers at Mersin University tried to

explore the process by participating in international common projects. In addition to the projects conducted among student teachers, student teachers studying in classroom teaching also participated in projects in which primary school pupils were involved. Within the scope of eTwinning ITE, Mersin University Educational Faculty Member Assoc. Prof. Dr. Ümit İzgi Onbaşılı and Balıkesir University Educational Faculty Member Assoc. Prof. Dr. Burcu Sezginsoy Şeker carried out two international projects titled "What Kind of World Do We Want?" and "Qualified Teacher of the Future". Italy, France and Germany took part in the projects as partner countries. In this way, student teachers had the chance to meet teacher educators and work online.

The first project was aimed to increase the awareness of the student teachers about sustainable environmental education, the causes and effects of climate change. The second project fostered collaboration among student teachers from various cultural backgrounds through the use of the TwinSpace, working together to boost their cultural, personal and professional development through eTwinning activities. In the first project, the activities were conducted with student teachers and primary school students.

A total of six teacher educators and 30 student teachers from Türkiye, Germany, France and Italy took part in the second project. The project "Qualified Teacher of the Future" was published on the websites of the universities and was featured in the press. In particular, it was disseminated on the website of University of Picardy Jules Verne, one of the leading institutions in student education in France. In the website the project is mentioned as: «Students from Germany, Türkiye, Italy, France communicated in German, English, Turkish, French and Italian languages. They are enriched by their history and culture, differences and meeting points that go back several thousand years. But they see the future promising because they all have the same dream and share the same values: to become a teacher of the future. Thanks to the project, prospective teachers at Mersin and Balıkesir universities were able to cooperate with students at INSPÉ centers in Laon and Amiens, German students in Stuttgart-Ludwigsburg and Sicilian students from Università degli Studi in Palermo»².

The journey of teacher educators from Türkiye, France, Germany, and Italy, which initially began with the aspiration of transforming their projects into an Erasmus initiative, culminated in a gathering hosted by the University of Palermo in Italy from 25 to 30 April 2022. This meeting was organized as part of the Erasmus+mobility program. Two teacher educators took part in this event, where they converged to discuss and strategize potential projects for the forthcoming years. During

^{1.} The activities can be followed from these links: https://youtu.be/B9d5ZuXoqDg; https://youtu.be/goCz wdIx6U.

 $^{{\}it 2.} \quad https://www.u-picardie.fr/ecole/inspe/projet-etwinning-de-l-inspe-qualified-teacher-of-the-future-656425.kjsp.$

this gathering, a blend of in-person and online training sessions were conducted for student teachers in Italy. The participants engaged in comprehensive discussions, addressing topics ranging from the eTwinning Initial Teacher Education process to the intricacies of various projects. These interactions facilitated the exchange of knowledge and ideas among the educators, enhancing their collective understanding and expertise in the field.

The testimonials from student teachers engaged in this project provide us with significant insights into the impact of eTwinning. Here are the thoughts of student teachers from Türkiye who have participated in various eTwinning projects:

- Student teacher 1: «Being a Balıkesir University student in Türkiye, I find eTwinning truly inspiring. The platform's most significant aspect is the opportunity to connect with new cultures and collaborate internationally. I believe this feature will greatly enhance our involvement in international projects. Through eTwinning, I anticipate experiencing diverse training opportunities»;
- Student teacher 2: «As student teachers, international initiatives like eTwinning hold immense importance for us. Adapting to the evolving world for the sake of the future is crucial. Collaborating with students from other schools is essential, and eTwinning provides a valuable resource for research. This platform offers insights into educational practices across different schools and European countries»;
- Student teacher 3: «Participating in this project marks my first encounter with such an initiative. I am confident that this project will contribute significantly. Thanks to eTwinning, we'll become acquainted with diverse cultures and educational systems from various schools. Collaboratively, we'll devise solutions to challenges. I am genuinely excited about this opportunity»;
- Student teacher 4: «Being among the first student teachers in this learning community and having the chance to experience it fills me with excitement. Our rapidly evolving world has intertwined education and technology, a process that the pandemic has accelerated. We've observed numerous countries integrating technology into education. Consequently, digital competence has become essential for all of us. In this context, eTwinning has provided us with a fantastic avenue. My hope is that the project we've undertaken will inspire fellow student teachers».

These testimonials highlight the enthusiasm student teachers have for eTwinning and the transformative impact it has on their perspectives, skills, and aspirations in the realm of education and technology.

Within the scope of eTwinning ITE, student teachers of Düzce University and Salerno University, together with partners from Italy and Spain, participated in the project titled "Culture in the ELT Classroom: Developing English Course Content within a Cross-Cultural Perspective". This project is aimed to work together to contribute to students' professional development, selecting, adapting and evaluating ELT course content and materials for student teachers based on an intercultural perspective, curriculum requirements, appropriate digital content development, e-safety and raising awareness of online material copyright issues.

9.7 Last remarks

Considerable research has been conducted and continues to unfold regarding the potential benefits of eTwinning for both teachers and students. In particular, research involving teachers reveals several distinct advantages, including gaining insights into diverse educational practices across schools and European nations, enhancing proficiency in foreign languages, effectively integrating information technologies into teaching, fostering student motivation through engaging lessons, and advancing professional development. For educators, eTwinning enhances their professional recognition by contributing to their ongoing development. It provides a means to connect with colleagues, receive acknowledgment and share their accomplishments in their careers. Similarly, for students, the impacts of eTwinning encompass increased motivation in lessons, cross-school and cross-country peer communication, cultural awareness and exposure, language acquisition, understanding the educational facets of web technologies, and heightened participation in classes. These outcomes align closely with the results observed in an extensive eTwinning project involving student teachers from Türkiye, France, Italy, and Germany. This research underscores the wide-reaching effects of eTwinning on both educators and learners, emphasizing its role in cultivating cross-cultural engagement, enhancing pedagogical practices, fostering technological literacy, and promoting collaborative learning environments.

In Türkiye, teachers display a preference for engaging in face-to-face training sessions and workshops alongside the projects they undertake. However, for those educators leading eTwinning projects who opt out of in-person activities, eTwinning offers a platform for participation in online activities. The teachers find satisfaction in sharing the digital materials they've prepared for their lessons with peers within their eTwinning group on the portal. This platform serves as a hub for staying informed about advancements in educational technologies, and teachers consider it to be secure and user-friendly. The eTwinning Live page is regarded as a personal and private space. The TwinSpace, which is uniquely designated for each project, proves ideal for documenting projects and facilitating comfortable sharing of project activities. As to students, there are some prominent topics such as being more motivated to the lesson, communicating with peers from other schools or countries, learning different cultures, being able to communicate in a foreign language, realizing the educational aspect of web technologies, participating more actively in classes. These effects are also in line with the results of the eTwinning project, which was conducted extensively with student teachers from Türkiye, France, Italy and Germany.

In a study conducted by educational instructors focusing on ITE activities, specifically the work of Onbaşılı *et al.* (2022), an exploration into educators' perspectives on eTwinning projects was undertaken. The study delved into how these

projects influenced teachers' professional growth, the challenges they encountered during project implementation, and potential remedies, all within the context of enhancing their digital competencies. Within this research, educators were queried regarding the competencies fostered by eTwinning projects for students. Analysis of their responses highlighted the emphasis on skills such as collaborative teamwork, effective utilization of technology, adeptness in Web 2.0 tools, self-expression, social and communication prowess, self-assurance, a sense of responsibility, and the enhancement of communication proficiencies. The findings from the research illuminated that eTwinning activities significantly impacted teachers' professional abilities, including proficiency in foreign languages, adeptness with technology, innovative pedagogical approaches, and expertise in specialized training areas such as STEM, Philosophy for Children (P4C), and storytelling. Moreover, the activities also contributed to cultivating XXI century skills encompassing cooperation, communication, critical thinking, and creative problem-solving. A participant in the study articulated their perspective, affirming: «I believe that, particularly during the pandemic period, it has substantially enhanced digital competencies both in terms of quality and content within the context of remote education». Notably, during the abrupt transition to distance learning in Türkiye, educators experienced in eTwinning reported a notably smoother adaptation to this new mode of instruction. Importantly, the research outcomes have been disseminated to fellow educational instructors, student teachers, and practicing teachers throughout Türkiye.

On the other side, in a study in which pre-service teacher education meta-analysis in Türkiye examined by thematic analysis, it is emphasized that it is necessary to eliminate the discrepancies between theory (the knowledge and skills offered in universities) and practice (the knowledge and skills required by schools), and increasing the interaction of higher education institutions with schools is ultimate (Yücel-Toy, 2015). In this context, we can say that eTwinning is a great opportunity to strengthen the bound between universities and schools.

Upon scrutinizing the reports presented by Gilleran and Kearney in 2014 regarding the eTwinning initiative, a conspicuous observation emerges: eTwinning projects distinctly foster the advancement of students' competencies in a favourable manner. It becomes evident that these projects, replete with manifold advantages, inevitably entail certain challenges. In this regard, a crucial assertion is made regarding the imperative to provide support for educators engaged in project-based learning and other pertinent methodologies consonant with a competency-oriented approach. This indispensable support can be feasibly actualized through a comprehensive restructuring of the Initial Teacher Education frameworks, coupled with an unwavering commitment to continuous professional development and a spirit of collaboration among colleagues.

The assessment of university accreditation procedures in Türkiye has been examined within the framework of the European Higher Education Area (EHEA). Notably,

the educational faculties in Türkiye have demonstrated adeptness in successfully navigating this evaluation process. Against the backdrop of the "new normal" era, there arises a crucial need to re-evaluate the pedagogical methodologies employed by higher education institutions tasked with training future educators. A paramount consideration involves delineating the kind of educators that aspiring student teachers must evolve into, given the dynamics of the contemporary world.

Within this context, the evolution of the eTwinning ITE process can be advanced by strategic planning that aligns with the spectrum of international competencies. It is worth emphasizing that efforts to incorporate eTwinning activities into the curricula of education faculties in Türkiye and elsewhere have registered a notable uptick over time. Significantly, student teachers still evince a preference for in-person training experiences concerning eTwinning methodologies. An avenue with substantial promise entails facilitating student teacher internships, particularly in educational institutions actively engaged in eTwinning projects. Such internships hold the potential to markedly enrich their perspective and broaden their horizons.

References

- COUNCIL OF THE EUROPEAN UNION (2018a), Council Recommendation of 22 May 2018 on Key Competences for Lifelong Learning (Text with EEA Relevance), Official Journal of the European Union, C 189.
- ID., (2018b). *Recommendation on Key Competencies Updated in 2018*, Official Journal of the European Union, C 189.
- DOGER M. F. (2015), *eTwinning Project Studies: FATIH Project in Education*, Educational Technologies Summit, MEB General Directorate of Innovation and Educational Technologies, Meter Matbaacılık, Ankara, p. 149.
- ID. (2022), The Transformative Role of Social Networks in Education: Example of eTwinning Activity, in "KSU Journal of Education", 4, 2, pp. 83-103.
- ID. (2023), *Teachers in Social Networks*, Doctoral Thesis, Ankara University.
- ETWINNING (2022), *Step by Step eTwinning*, Ministry of National Education (MEB), General Directorate of Innovation and Educational Technologies.
- ONBAŞILI Ü. I. et al. (2022), Experiences of Qualified Teachers of the Future in the Scope of an International eTwinning Project, in "International Online Journal of Primary Education", II, 2, pp. 293-311.
- UNESCO (2021a), Sustainable Development Goal 4 and Its Targets, https://en.unesco.org/education2030-sdg4/targets.
- ID. (2021b), From Recovery to Accelerating SDG 4 Progress: 2021 Global Education Meeting, https://www.unesco.org/en/articles/recovery-accelerating-sdg-4-progress-2021-global-education-meeting-ministerial-segment#:~:text=Article-,From%20recovery%20to%20accelerating%20SDG%204%20progress,Global%20Education%20Meeting%20%2D%20Ministerial%20Segment&text=The%20COVID%2D19%20crisis%20has,populations%20exacerbating%20existing%20learning%20inequalities.

- ID. (2022), *Turkiye National Commission 2018-2019 Annual Reports*, Grafik-Ofset Matbaacılık Reklamcılık, Ankara.
- YÜCEL-TOY B. (2015), Thematic Analysis of Pre-service Teacher Education Research in Turkiye and Reflections of Teacher Education Policies, in "Education and Science", 40, 178, pp. 23-60.





