



Teachers' professional development

An overview of current practice

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Executive summary

Background

The focus of this report is to understand how eTwinning and national and local teachers' professional development schemes interact. It is based on the findings of the monitoring actions of eTwinning by the Central Support Service in the year 2010.

OECD's report (TALIS, 2009) finds that "informal dialogue to improve teaching" is mentioned as the most frequent activity for professional development with a participation rate of more than 90% in most countries. Similarly, a "professional development network", which eTwinning can also be considered as, ranks high on the perceived impact on teachers' development, although it is not among the high participation rated activities. More formal type of professional development activities like "courses and workshops" and "educational conferences and seminars" are characteristics for eTwinning, too. This can indicate that eTwinning, as a professional development network, has high potential to satisfy some of the teachers' professional development needs in Europe.



Structure of the report

The monitoring focused on three countries that have shown success in their eTwinning activities, namely Estonia, Poland and Spain, and examines three main questions:

- ▶ What is the relationship between eTwinning and professional development?
- ▶ How do they influence each other and how do they support each other?
- ▶ How can eTwinning contribute to professional development, and vice versa?

Section 1 forms the introduction and examines the reasons for choosing the topic of dynamics between eTwinning and professional development as well as the methodology employed.

The methodology used to examine the questions comprises three phases:

- ▶ Desk research to:
 - ▶ Analyse the current statistics relating to the registration of teachers and schools in eTwinning (Section 2).
 - ▶ Select the three countries for overview of practice in professional development policy (Section 3).
- ▶ An examination of the three National Support Services each of the selected countries presented its organisation and its eTwinning and professional development strategy.
- ▶ Interviews with National Support Service staff in each country.

Section 2 of the report examines the development of the eTwinning action and the diversification of the elements of professional development opportunities that have emerged over the past five years. It examines the current statistics relating to the number of registered teachers, schools and projects and introduces the new concept of *eTwinning reach*, defined as the number of registered users of a country divided by the teacher population within this country. *eTwinning reach* is rooted in the popular idea of Diffusion of Innovations (Rogers, 1962).

Some interesting observations can be derived from this information:

- ▶ On average, the eTwinning action concerns 2.29% of the potential teaching population within the participating countries.
- ▶ The indicator *eTwinning reach* can be used to monitor growth of eTwinning over a period of time.
- ▶ *eTwinning reach* becomes useful in this report in understanding eTwinning as part of different professional development activities that are offered to teachers for their in-service training and professional development purposes.

Section 3 – 5 of the report concentrate on the in-depth study of the three countries chosen for the overview of practice (Estonia, Poland and Spain).

Section 6 focuses on the observation and reflections arising from the analysis in relation to the questions posed at the beginning.

Conclusions

In the overall analysis it is concluded that several positive underlying framework conditions exist in each of the countries studied. E.g.:

- ▶ In each of the countries, teachers' career paths consist of different stages where promotion from one stage to another is related to professional development.
- ▶ The curriculum in each country has a European dimension, which can indicate the benefit of project work at the European level.
- ▶ There is a demand for professional development in all participating countries.
- ▶ Teachers' ICT maturity and skills count as an underlying condition.

In relation to question 1: "What is the relationship between eTwinning and professional development?" the following observations were made:

- ▶ From the overviews of practice in Estonia, Poland and Spain, it is concluded that there is a strong link between eTwinning and professional development in all three countries.
- ▶ There are many similar features, one of which is the status of eTwinning as part of the formal professional development and career advancement programmes.

In relation to question 2: "How does eTwinning influence and support professional development?" it is observed that:

- ▶ eTwinning can develop an "individual's skills, knowledge, expertise and other characteristics as a teacher."
- ▶ eTwinning is also seen as something that allows up-skilling in areas such as the use of ICT to support teaching, language learning, project management skills and other areas of personal development.
- ▶ eTwinning is not a trigger for professional development, but an added value.

In relation to question 3, "How can eTwinning contribute to professional development, and vice versa?" it is concluded that:

- ▶ eTwinning has great potential to improve teachers' continuous professional development and lifelong learning at the European level as well as national and local level, if it is given recognition as the "professional development network" where plenty of opportunities arise for its members to participate in "informal dialogue to improve teaching".
- ▶ Establishing and acknowledging eTwinning as a teachers' professional development network that gives opportunities for a variety of professional development activities could enhance eTwinning's status among the other professional development activities on offer in all the participating countries.

In order to understand a wider application of the findings of this report, future monitoring activities will be direct at scrutinising the user behaviour when using the eTwinning portal and its tools in order to investigate how the eTwinning platform with its push towards social networking can actually support and foster the concept of a teachers' *professional development network*. Also, the publication in 2011 of the set of case studies with the themes of recognition for work in eTwinning and pupil involvement should add a deeper understanding of the complex issues involved.

Introduction

Chapter 1

The eTwinning action is defined as *the community for schools in Europe*. It promotes teacher and school collaboration through the use of Information and Communication Technologies (ICT). Currently, thirty-one countries in Europe participate in eTwinning. Since 2005, eTwinning has been one of the most successful actions of the school education programme (Comenius) under the European Union's Lifelong Learning Programme.¹



From a survey conducted in late 2008, where 1,308 eTwinning teachers from different countries were surveyed (Crawley et al., 2009), we know that one third of the respondents said they signed up for eTwinning to improve their teaching skills. Moreover, more than 75% of the respondent teachers stated that their eTwinning project had had an impact, or even a high impact, on improving their ICT skills, communication skills, teaching skills and interdisciplinary working skills, as well as learning about new teaching methods. Additionally, and unexpectedly, when describing their eTwinning project, over 90% described their eTwinning project as, "it was fun".

The survey from 2008 brings evidence that a teacher and school collaboration initiative, such as eTwinning, has a place among a wide panoply of professional development activities that range from qualification programmes to informal peer dialogue to improve one's teaching practices. OECD's report (TALIS, 2009) finds that "informal dialogue to improve teaching" is mentioned as the most common activity for professional development with a participation rate of over 90% in most countries. Interestingly, teachers also report that participation in informal dialogue has a moderate or high level of impact on their professional development (Figure 1). Similarly, involvement in a "professional development network", which eTwinning can also be considered to be, ranks high as regards the perceived impact on teachers' development, although it is not among the high participation rated activities. More formal types of professional development activities, such as courses,

¹ See: http://ec.europa.eu/education/programmes/lfp/guide/fiches/comenius10_en.html

workshops, educational conferences and seminars are also characteristics of eTwinning. This can indicate that eTwinning, as a professional development network, has a high potential for satisfying some of the professional development needs of teachers in Europe.

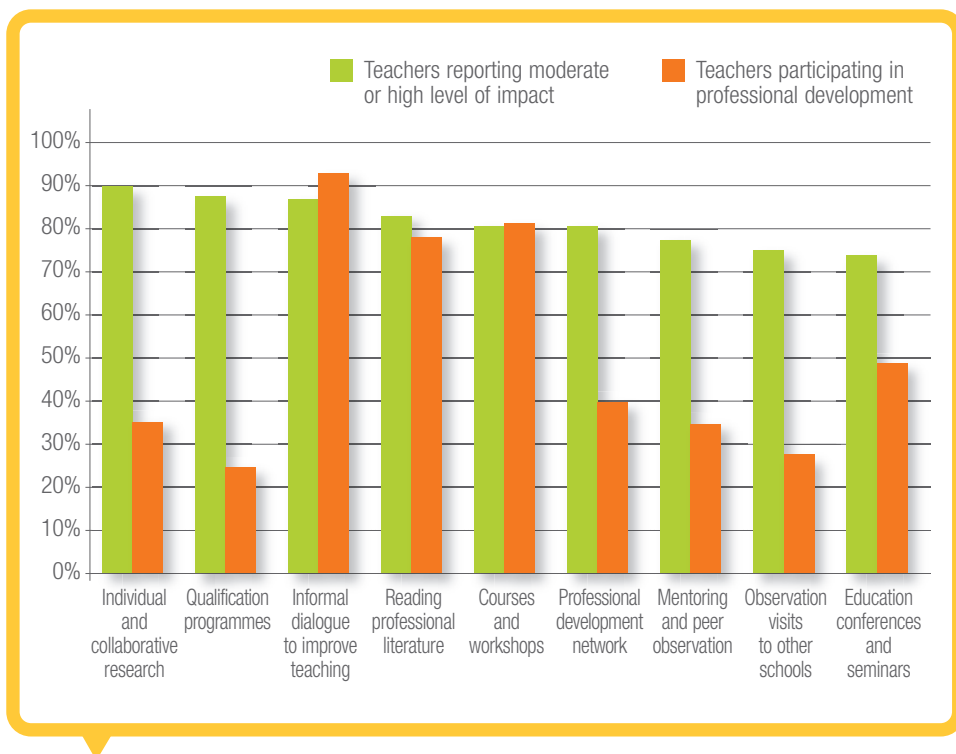


Figure 1. Comparison of impact and participation by types of development activity (2007-08)

This report focuses on the monitoring activities of the Central Support Service for eTwinning in 2010, the aim of which is to gain a deeper understanding of the dynamics between eTwinning and teachers' professional development. The monitoring focused on three countries – Estonia, Poland and Spain – that have demonstrated success in their eTwinning activities while having quite different application contexts.

The reasons for choosing the topic of dynamics between eTwinning and professional development are manifold. Among them, the following stand out:

- Professional development, together with recognition, has been pointed out by the teachers' answers to the 2008 survey as one of the most crucial aspects for them to be addressed in future.

Teachers' professional development

- ▶ It is one of the five priority objectives of 2010 (as set by the eTwinning management).
- ▶ The topic has been confirmed as a central concern by a recent online consultation of the National Support Services (NSS) about topics to be investigated through case studies.²

Three main questions are examined in the report:

- ▶ What is the relationship between eTwinning and professional development?
- ▶ How do they influence each other and how do they support each other?
- ▶ How can eTwinning contribute to professional development, and vice versa?

For this report, we adopt the following definition of teachers' professional development: "Professional development is defined as activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher. This definition recognises that development can be provided in many ways, ranging from the formal to the informal. It can be made available through external expertise in the form of courses, workshops or formal qualification programmes, through collaboration between schools or teachers across schools or within the schools in which teachers work" (TALIS, 2009: 49).

Teachers' professional development schemes differ greatly across Europe (Figure 2), ranging from being a professional duty in some countries (e.g., in Estonia) to totally optional in others (e.g., in Italy). In a number of countries (e.g., in Poland and Spain) professional development is optional, but necessary for promotion. This results in great differences between professional development cultures in Europe. In TALIS countries³, teachers show participation in professional development for 0.85 days/ month. More than half of these teachers report that they wanted more professional development than they received during the 18-month survey period (TALIS, 2009).

In terms of the structure of the report, it is organised in six sections:

Section 1 examines the professional development context of the report as well as outlining the methodology for addressing the questions posed.

Section 2 focuses on documenting how eTwinning and its opportunities for teachers' professional development have evolved since its beginning in 2005.

² Case studies will be published in this same eTwinning report series in 2011.

³ Countries participating in TALIS: Australia, Austria, Belgium (Fl), Denmark, Hungary, Iceland, Ireland, Italy, Korea, Mexico, Norway, Poland, Portugal, Slovak Republic, Spain, Turkey, Brazil, Bulgaria, Estonia, Lithuania, Malaysia, Malta, Slovenia.

Sections 3, 4 and 5 present the three country overviews that all follow the same format:

- (1) They tell the story of an eTwinning teacher who participates in an eTwinning Professional Development Workshop (PDW) abroad. The aim of this is to highlight differences between the countries and how their educational systems operate.
- (2) A macro-level view is offered on what is termed the educational landscape in each of the selected countries. Through this view, a number of framework conditions are pointed out, e.g., legislation regarding teachers' professional development, teaching as a career, how ICT is integrated in schools and how European dimension is displayed in the national core curriculum. It is assumed that all these framework conditions, with their own particularities, add to the success of eTwinning actions in these countries.
- (3) Each country overview looks at the dynamics between eTwinning and teachers' professional development.

Lastly, Section 6 focuses on observations and reflections generated by the analysis of the three country overviews.

Methodology

The starting point of the analysis is at the macro level addressing the main question, “what is the relationship between eTwinning and professional development?” by looking at eTwinning statistics on the one hand, and policy-level decisions and their practical implementations for professional development on the other. The other two questions (“how do they influence each other and how do they support each other?” and, “how can eTwinning contribute to professional development, and vice versa?”) are then examined in the light of the outcomes of this analysis.

The methodology comprises three phases:

1. Desk research to:

- a) analyse the current statistics relating to the registration of teachers and school in eTwinning (Section 2), and,
- b) select the three countries for an overview of practice in professional development policy.

Previous monitoring activities have already provided anecdotal evidence that professional development and eTwinning have demonstrated synergies in some countries. Examples of such countries are the Czech Republic, Estonia, Greece, Portugal, Poland and Spain.

The following methods were used for the selection of the three countries:

- ▶ Monitoring of eTwinning statistics for trends by country.
- ▶ Examining the results from the eTwinning Survey conducted in late 2008 (Crawley et al., 2009).
- ▶ Desk research using OECD's Teaching and Learning International Survey (TALIS) 2009, Eurydice reports on *Organisation of the Education System* and European Schoolnet's *Insight Country reports*.

2. National Support Service: organisation and arrangements within the country

The NSS of each of the selected countries presented its organisation and its eTwinning and professional development strategy. Presentations were given at a meeting in Brussels, Belgium, from 18-20 May 2010.

3. Interview with the National Support Service in each country

Interviews focused on the dynamics between eTwinning and teachers' professional development. The three interviews were conducted during an eTwinning Professional Development Workshop (PDW) for Central and National Support Services in Bruges, Belgium, on 20 June 2010.

Evolution of eTwinning and its opportunities for professional development

Chapter 2

As stated in the introduction, eTwinning is regarded as the *community for schools in Europe*. Teachers from all participating countries can register and use the eTwinning online tools to find each other, meet virtually, exchange ideas and practice examples, team up in eTwinning Groups, learn together in Learning Events and engage in online-based projects. The eTwinning online tools are provided by the Central Support Service (CSS), the coordinating body of eTwinning run by European Schoolnet. Additionally, each country involved has a National Support Service (NSS) that represents and promotes the eTwinning action by providing training and support (face-to-face, by phone and online), organising meetings and national competitions, and running media and public relations campaigns.

Since the beginning of eTwinning in 2005, creating an *eTwinning Project*, has been the main focus of the action. A minimum of two schools from at least two European countries create a project and use ICT to carry out their work. As teachers and schools communicate and collaborate via the Internet, there are no grants or administrative conditions connected to the scheme and face-to-face meetings are not required. A project can be initiated on any topic, It should have a good balance of ICT use and classroom activities, and it they should preferably fit into the national curricula of the participating schools. An eTwinning project can be carried out by two or more teachers, teams of teachers or subject departments, librarians, head teachers and pupils from schools across Europe. Collaboration can be within the same subject or cross curricular through the use of ICT. Pre-school, primary, secondary and upper secondary schools can all participate (age range of pupils: 4-19 years).

To recognise the work that teachers invest in their eTwinning projects, two mechanisms have been put in place:

- (1) a *Quality Label*, as a sign of recognition of eTwinning excellent activities awarded to schools. NSS award National Quality Labels to schools that successfully apply for it, and, if at least two schools in a project receive a National Quality Label, these awarded teachers are then automatically awarded with a European Quality Label⁴ by the CSS.
- (2) *European eTwinning Prizes*, awarded every year to schools selected by a European evaluation board. In most participating countries, national prizes are also awarded by the NSS through national competitions.



Moreover, in eTwinning we can separate formal from informal recognition. The above-mentioned methods count for formal recognition⁵. Informal recognition, on the other hand, may be considered as the recognition that teachers receive from peers, school management, pupils and parents. Additionally, informal recognition can be related to teachers' intrinsic motivation to participate in eTwinning and their personal development goals.

Since December 2005, eTwinning has diversified its offers to schools by initiating European-wide Professional Development Workshops (PDW). They are aimed at individuals who want to learn more about eTwinning and develop their skills in European collaboration using ICT. Aims of these workshops also include tackling some of the key competences at the European level, e.g., communication in foreign languages, digital competence, and interpersonal, intercultural and social competences. These workshops bring together participants from different European countries to network and share experiences. The format includes approximately 100 participants: 30 from the hosting country and 70 from other countries.

The success of the European-wide PDWs was immediate. Within the two first years of eTwinning, more than 1,400 teachers had participated in PDWs that had been organised in different eTwinning countries (see Table 1). With a pre-set number of participants, though, it quickly became clear that only a fraction of teachers who had registered on the eTwinning Portal were able to benefit from these PDWs. In large countries like Spain, barely 0.5% of registered teachers had participated in PDWs, whereas in smaller countries even 20% of registered teachers (e.g., Slovenia) had participated in PDWs (Gillera, 2007).

⁴ European Quality Labels are awarded once a year in October.

⁵ From the Twinning Glossary:

Timeline	Type of activity	Total # of teachers
School year 2005-2006	10 PDWs	684
School year 2006-2007	11 PDWs	794
2008	7 PDWs	583
2009	7 PDWs	596
2010	10 PDWs	797
School year 2008-2009	All types of events (as reported by NSS)	28,197
October 2008 - January 2009	Pilot eTwinning Groups	203
Spring and autumn 2009	8 Learning Events	1,440
Spring and autumn 2010	15 Learning Events	2,000+

Table 1. Some Examples of diversifying eTwinning Professional development opportunities and # of participants

The introduction of the eTwinning Groups on a pilot basis in late 2008 and online Learning Events in 2009 offered new opportunities in the area of professional development and brought together specific interest groups for networking purposes (see Table 1). This was part of a *beyond school projects* strategy with the aim of transforming eTwinning from a partnership tool to a virtual community for teachers in Europe⁶. eTwinning Groups allow participants to connect with European colleagues who share similar interests. Groups vary in focus from kindergarten teachers to secondary school teachers. Groups are a way to discuss ideas, share experience and learn from peers. eTwinning Groups run on online platforms in order to facilitate communication and sharing.

Learning Events, on the other hand, are short intensive online events on a number of themes to improve professional development and meet new people. They are led by an expert and include active work and discussion among teachers across Europe. The idea of a Learning Event is that it is a short intensive course that offers an introduction to a topic, stimulates ideas, helps develop skills and does not require a long-term commitment in terms of time. It is also designed to be an enjoyable learning experience. Each learning event has 4-5 days of active work and discussion, followed by 4-5 days of reflection and personal work. All materials are online and since their inception, there have been over 3,400 participants in Learning Events. In 2009, at their request, about 30% of the participants also received a certificate for their participation.

6 Press release: http://www.etwinning.net/en/pub/news/press_corner/13102008_press_release.htm

Additionally, in 2006, some of the first national training session began taking place, mixing face-to-face with online methods. During the school year 2008-2009, all NSS were asked to report on their eTwinning professional training events and activities. It was estimated that more than 28,000 European teachers participated in these events in one way or another. They include all types of events, mostly face-to-face, ranging from half a day to three-day events such as PDWs, annual and national eTwinning conferences, eTwinning prize ceremonies, training workshops, lectures and presentations. As a summary of evolution of eTwinning and its opportunities for professional development, figure 3 depicts the evolution and multimodality of eTwinning professional training activities.

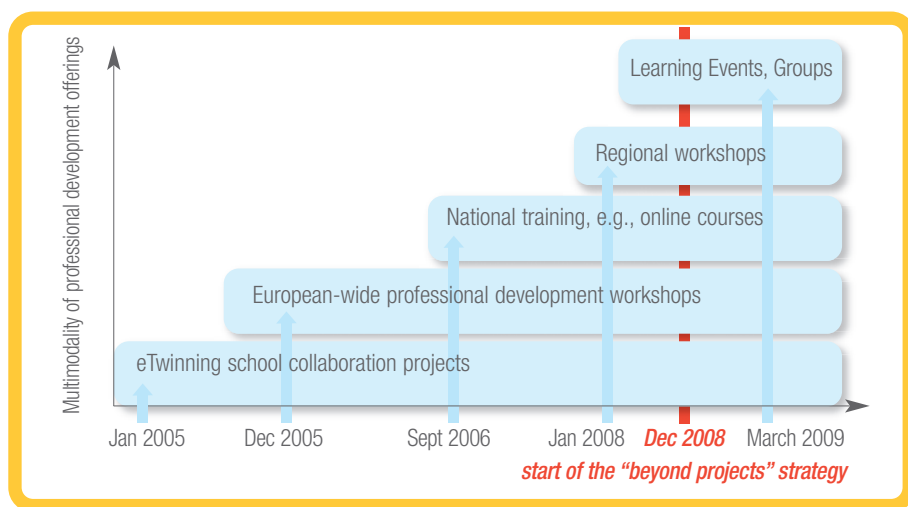


Figure 3. eTwinning evolution from project towards more diversified professional development offers

2.1 eTwinning as part of professional development at national level

While there are various professional development activities offered at European level for teachers in eTwinning, formal professional development activities as such certainly vary from country to country. In some countries, eTwinning is considered a formal opportunity while in others its more informal and thus does not contribute officially to one's professional development. Table 2 shows the relationship between eTwinning and professional development in eTwinning countries (see also Table 6 in the Appendix). eTwinning is a fully accepted element of formal teachers' professional development in seven countries and is accepted to some extent in eleven countries.

Can eTwinning be used for formal professional development purposes in your country?

(formal = teachers can get some credits and a certificate)

	Yes	To some extent	Not at all
N=29 ⁷	7	11	10
 Austria		1	
 Belgium (Dutch-speaking community)			1
 Belgium (French-speaking community)			1
 Bulgaria		1	
 Croatia			1
 Cyprus		1	
 Czech Republic		1	
 Denmark		1	
 Estonia	1		
 Finland			1
 France		1	
 Germany		1	
 Greece		1	
 Hungary			1
 Ireland			1
 Italy		1	
 Latvia			
 Lithuania	1		
 Malta		1	
 The Netherlands			1
 Norway			1
 Poland	1		
 Portugal	1		
 Romania			1
 Slovakia		1	
 Slovenia	1		
 Spain	1		
 Sweden			1
 United Kingdom			1

Table 2. eTwinning interacting with professional development plan

7 29 of the 33 NSS in eTwinning are represented in Table 2. Data was not available for the German-speaking community of Belgium, Iceland, Luxembourg and Turkey.



As eTwinning continues to develop and expands its offer of professional development events and training, it will in turn be interesting to see how such activities will develop further into recognised actions at national level.

2.2 Monitoring eTwinning

Since its inception, eTwinning statistics have been gathered on the eTwinning Portal using different methods such as user registration, the interaction of users with the different tools and website analytics to monitor visitors on the site (Crawley et al., 2009). The number of registered teachers, registered schools and participation in eTwinning projects has constituted the core statistics. Using these figures, it is easy to monitor how teachers engage in eTwinning projects; however, these figures give only a limited understanding of eTwinning's success and uptake within the entire teacher population of a given country. To this end, in this section we first introduce generic eTwinning statistics and then explain the new instrument called *eTwinning reach*, which better allows gauging eTwinning's place in the entire spectrum of professional training activities within the country.

Table 3 shows generic eTwinning statistics: the number of registered teachers, registered schools and participation in eTwinning projects. This type of statistic gives an idea of the volume of eTwinning teachers relative to the size of their country. In general, we find a high positive correlation (Pearson's $r = 0.880$) between the population within a given country and the number of registered eTwinners.

































	Country	Population	Registered users	Projects	Projects /Total projects	Projects /Total users
	Austria	8,372,930	995	497	1,0%	49,9%
	Belgium	10,827,519	1601	840	1,7%	52,5%
	Bulgaria	7,932,984	1925	1206	2,5%	62,6%
	Croatia	4,489,409	115	53	0,1%	46,1%
	Cyprus	801,851	470	333	0,7%	70,9%
	Czech Republic	10,512,397	3746	2077	4,2%	55,4%
	Denmark	5,547,088	1608	464	0,9%	28,9%
	Estonia	1,340,274	1599	473	1,0%	29,6%
	Finland	5,350,475	1808	819	1,7%	45,3%
	France	64,709,480	12075	4446	9,1%	36,8%
	FYROM	2,114,550	182	138	0,3%	75,8%
	Germany	81,757,595	5695	2601	5,3%	45,7%
	Greece	11,125,179	3701	2516	5,1%	68,0%
	Hungary	10,013,628	1254	555	1,1%	44,3%
	Iceland	317,593	390	228	0,5%	58,5%
	Ireland	4,450,878	817	416	0,8%	50,9%
	Italy	60,397,353	9111	4741	9,7%	52,0%
	Latvia	2,248,961	858	397	0,8%	46,3%
	Lithuania	3,329,227	1663	1039	2,1%	62,5%
	Luxembourg	502,207	114	64	0,1%	56,1%
	Malta	416,333	872	460	0,9%	52,8%
	The Netherlands	16,576,800	2105	772	1,6%	36,7%
	Norway	447,897	1265	435	0,9%	34,4%
	Poland	38,163,895	12168	6201	12,6%	51,0%
	Portugal	11,317,192	2740	1619	3,3%	59,1%
	Romania	21,466,174	6862	3242	6,6%	47,2%
	Slovakia	5,424,057	2502	1270	2,6%	50,8%
	Slovenia	2,054,119	725	617	1,3%	85,1%
	Spain	46,087,170	9709	3803	7,7%	39,2%
	Sweden	9,347,899	2534	862	1,8%	34,0%
	Turkey	76,500,000	15739	2284	4,7%	14,5%
	United Kingdom	62,041,708	11068	3638	7,4%	32,9%

Table 3. eTwinning statistics from December 2010



Another eTwinning indicator is the percentage that the projects within the given country account for in the number of overall projects conceived in eTwinning (projects/total projects). This is shown in the second column from the right in Table 3, where the percentages of all registered projects are listed. It can be seen that proportionally Polish and Italian teachers have created the most eTwinning projects: 12.6% and 9.7% respectively.

Lastly, using the same numbers, we can monitor what proportion of the teachers who have signed up on the Portal are engaged in projects. This is represented in the last column of Table 3. Here, it can be seen that, for example, the number of Polish teachers involved in projects amounts to about half the number of all the registered Polish teachers. However, from our previous research on eTwinning (Breuer et al., 2009) we know that projects are not initiated equally by eTwinners (i.e., project partners); thus these figures cannot be interpreted to mean that half of the eTwinning teachers in Poland are also active in projects. They can indicate, however, a high activity rate amongst some Polish eTwinners, still using the example of Poland. Secondly, with this last indicator, it can be observed that even if only a small number of teachers are registered in eTwinning, they are very active in participating in projects. This can be observed with countries such as Slovenia, the Former Yugoslav Republic Of Macedonia⁸, Cyprus and Luxembourg.

2.3 New indicator: *eTwinning reach* and move towards monitoring eTwinning 2.0

As opposed to using the number of teachers who signed up on the eTwinning Portal as a point of reference, new perspectives can be gained by using the entire teacher population in a given country for this purpose. This makes it possible to see how eTwinning has been taken up in relation to the entire teacher population, giving more indication about the spread and success of the eTwinning action within a given country. Therefore, we use *eTwinning reach* to indicate the percentage of teachers who are knowledgeable about eTwinning in a given country, a manifestation of which is that they have signed up on the Portal.

***eTwinning reach* = the registered users of a country
/ teacher population within this country**

eTwinning reach is rooted in the popular idea of Diffusion of Innovations (Rogers, 1962), "a theory of how, why, and at what rate new ideas and technology spread through cultures."⁹ To calculate *eTwinning reach*, the OECD data from 2007 (OECD statistics of educational personnel¹⁰) and the eTwinning data from May and November 2010 are

⁸ The Former Yugoslav Republic of Macedonia took part in eTwinning from 2009-2010.

⁹ http://en.wikipedia.org/wiki/Diffusion_of_innovations

used. It should be noted that this leaves discrepancy in the accuracy of data; however, it serves as a good proxy for our purpose. Out of thirty-one eTwinning countries, OECD statistics can be found for twenty-three of them, which represent 86% of the entire eTwinning population, and covers the countries that have been part of eTwinning for about the same duration (i.e., not all participating countries joined eTwinning at the same moment. Some, such as Turkey and Croatia, joined in 2009).

Moreover, to put *eTwinning reach* into a better context, visitor statistics are also provided on the eTwinning Portal by country (Table 4). The data was collected during one year (Oct 2009 to Oct 2010) using Google Analytics. The number of visitors contains returning visitors and first visits on the eTwinning Portal; the latter is around 32% throughout the countries. We acknowledge the inherent inaccuracy of web analytics on counting unique visits¹¹, nevertheless, their use can be justified to give an indication of interest in eTwinning in a given country.

On the two right-hand columns of Table 4, the data for *eTwinning reach* are presented. On average, in May 2010, 1.9% of the teacher population in countries indicated in Table 4 had registered on the eTwinning Portal. In November 2010, the average had increased to 2.29%. In general, rather small countries show higher percentages: Estonia, Iceland, Slovakia, Slovenia and Finland, but also the Czech Republic have reached beyond 2.5% of their teacher population. Similar indicators can be calculated not only for teachers, but also for schools. With some early indicative data collected from NSS, it is estimated that the *eTwinning reach* for schools is around an average of 25%¹².

10 <http://stats.oecd.org/> Data extracted on 8 Feb 2010 from OECD Stat (primary and secondary education, classroom teachers & academic staff, full-time and part-time for 2006 and 2007).

11 Discussions on problems related to web analytics can be found at: http://en.wikipedia.org/wiki/Web_analytics

12 Obtaining exact data regarding the number of schools is difficult as the definition of schools varies from country to country, as well as how National Support Services apply such a definition.



Teachers' professional development
























Country	Teachers (OECD 2007)	Visitors on eTwinning portal from October 2009-2010	Registered users on eTwinning in May 2010	eTwinning reach May 2010	eTwinning reach November 2010
 Austria	100,984	43,610	914	0.90%	0.95%
 Belgium	189,930	124,153	1,382	0.70%	0.81%
 Czech Republic	105,818	137,322	2,935	2.80%	3.44%
 Estonia	17,423	30,589	1,320	7.60%	8.91%
 Finland	68,442	46,840	1,472	2.20%	2.54%
 France	707,609	401,956	9,298	1.30%	1.63%
 Germany	835,980	275,667	4,606	0.60%	0.65%
 Greece	148,627	195,768	3,225	2.20%	2.32%
 Hungary	135,030	48,746	1,003	0.70%	0.90%
 Iceland	6,218	9,810	274	4.40%	6.03%
 Ireland	60,718	22,049	671	1.10%	1.30%
 Italy	723,870	454,420	7,365	1.00%	1.21%
 Luxembourg	6,973	3,036	103	1.50%	1.62%
 The Netherlands	245,876	65,108	1,684	0.70%	0.80%
 Norway	89,480	26,944	1,042	1.20%	1.34%
 Poland	521,037	523,791	9,895	1.90%	2.26%
 Portugal	157,239	83,339	2,239	1.40%	1.66%
 Slovakia	63,184	88,161	2,111	3.30%	3.87%
 Slovenia	22,290	34,693	564	2.50%	3.01%
 Spain	484,289	477,897	7,966	1.60%	1.89%
 Sweden	140,326	61,170	1,992	1.40%	1.75%
 Turkey	590,494	496,357	5,941	1.00%	2.38%
 United Kingdom	788,575	184,044	8,549	1.10%	1.35%
Average:	-	-	-	1.90%	2.29%

Table 4. Introducing novel eTwinning indicators: *eTwinning Reach*

Six interesting observations can be derived from this information:

- (1) On average, the eTwinning action concerns 2.29% of the potential teaching population within the participating countries. According to Rogers' model of diffusion of innovation (1962), eTwinning in most countries still remains limited to teachers who are "innovators" in using ICT for cross-country school collaboration. Some countries have passed the 2.5% milestone of "innovators" (e.g., Estonia, Iceland, Slovakia, the Czech Republic, Slovenia and Finland) and are currently targeting the segment of "early adopters" within their teacher population. Several of these countries have a relatively small population, although the Czech Republic has over 10 million inhabitants.
- (2) The indicator *eTwinning reach* can be used to monitor growth of eTwinning over a period of time.
- (3) The information presented in Table 4 puts opinions gathered from eTwinning teachers into a perspective with information that has been collected in other studies, such as TALIS (OECD, 2009).
- (4) *eTwinning reach* becomes useful in this report in understanding eTwinning as part of different professional development activities that are offered to teachers for their in-service training and professional development purposes.
- (5) If the *eTwinning reach* indicator is interpreted alone without the context of general interest on the eTwinning portal (e.g., by using web analytics), it can give an impression that the eTwinning action is hardly well known in the countries that implement it. However, if one examines by country the number of visitors to the eTwinning Portal compared to the number of registered users, it shows that, in general, there are many more visits on the Portal from participating countries than there are registered users (in Table 4, compare figures "visitors on eTwinning Portal" with "registered users"). This may be interpreted as a level of interest in eTwinning and in particular in Norway, Iceland, Estonia, Greece, Slovenia, Slovakia, Poland and the Czech Republic, the number of visitors on the Portal indicates a strong interest in eTwinning.
- (6) Based on calculations regarding the number of schools present in each country, it can be seen that the ration between available schools and registered schools is quite high (up to 25%) which demonstrates that the coverage of schools is much higher than the coverage of teachers. This in turn could potentially provide an opportunity to increase the eTwinning teachers reach through local dissemination.

The rest of this report will concentrate on three eTwinning countries – Estonia, Poland and Spain – which have been selected using the combined information from Tables 3 and 4. These three countries vary in their size and educational structure; however, all demonstrate successful eTwinning integration and thus are interesting for analysis. Although a number of other countries could also have been selected for analysis, e.g.,



the Czech Republic and Greece, they were omitted because the OECD TALIS report (2009) did not cover data from these countries. Similarly, countries such as Iceland, Slovakia, Slovenia and Finland, which ranked high on Table 4, were not chosen as it was considered that replicating the success of a small country did not necessarily provide scalable practices.



Estonia

Chapter 3

3.1 An Estonian eTwinning story

Krista, a language teacher from a small town in Estonia, has just heard that she has been rewarded with a trip to an eTwinning Professional Development Workshop (PDW) at European level. She is very excited about this, as previously her eTwinning project had won a National Quality Label. She considers that she almost “won” this trip, as only the three best projects at the national level get to go to a PDW. She can even choose the PDW that interests her. Besides, the NSS has told her to look for new project partners while at the PDW, so her head is full of new plans.

With the letter that the NSS sends to Krista’s school head, she is given permission to attend the PDW. She prepares some independent study material for her pupils and agrees with her colleague to take care of her classes while she is gone. This way the school head does not need to find any extra money for a substitute teacher. On her return from the PDW, Krista keeps her attendance certificate in a safe place. In a few years time, she will want to take the next step in her teaching career and become a “teacher methodologist”. In order to do that, she will need to show her teacher accreditation body at the Ministry of Education that she has engaged in professional development activities and acquired the necessary skills and competences.

The NSS also contacts Krista on her return home; they are keen to hear how the PDW went and ask her to share her experiences in a blog post on the national eTwinning website. Since the PDW that Krista attended was in the new and interesting area of mobile phone use in school, the NSS also asks her to write a methodological article for the Koolielu Portal¹³, the national portal for schools in Estonia. Krista is eager to do this, as she knows that many of her colleagues, and sometimes even her pupils, visit the Portal.

13 <http://arhiiv.koolielu.ee/>



3.2 Educational landscape

The Estonian population is approximately 1,370,000 inhabitants, of which 37% were under the age of 29 years in 2008. The population decline in Estonia means that there is a drastic decrease in school age children. This affects schools and the teacher-training sector in general, as schools are being shut down. Currently, there are fewer than 600 schools in general education and forty-five vocational schools; almost all of them have registered on eTwinning. About two-thirds of the population are Estonian, and the rest are residents with Russian origins and other minorities. The official language is Estonian; instruction is in most cases given in Estonian or Russian.

The Government of the Republic sets the national standards for education and the Ministry of Education and Research is responsible for the development and implementation of educational policy. There is a national curriculum for basic schools and upper secondary schools which each school uses as a basis for its own curriculum. Teachers are free to choose their teaching methods and textbooks.

The Ministry of Education provides the legal framework, including ICT standards for students and eLearning materials as a compulsory part of textbooks. It also coordinates participation in international research projects on ICT in education in order to have a professional basis for developing the strategy. The Ministry supervises basic and secondary schools at national level, whereas local government (municipalities) owns and maintains primary and secondary schools. The Ministry also cooperates with the municipalities to find sustainable ways of updating the ICT infrastructure in schools. There is an external school inspectorate related to the Ministry of Education (Eurydice, Estonia, 2009).

Teaching as a career and in-service training

Teachers' professional career in Estonia has four levels:

- ▶ Junior teacher
- ▶ Teacher
- ▶ Senior teacher
- ▶ Teacher methodologist

Since 2004, the first level has been done as a final "on-the-job" qualifying phase where support from tutors is made available. This lasts for one school year, after which the qualification to become a teacher is awarded.

Moving from one level to another is based on teachers' self-analyses, which consist of the reflection of the last four years' pedagogical work, teaching methods and in-service training. This results in an attestation, approving teacher qualifications, which is also reflected in the salary. If a senior-level teacher fails to engage in continuous professional development, he or she may fall back in status level. Participation in the eTwinning action (projects, training, publications) gives teachers an opportunity to present their professional development, ICT skills and integration of new methods into the daily curriculum; this is elaborated further in Section 3.4 (E. Allemann, personal communication, 18-20 May, 2010).

A special share (around 3% of the amount earmarked for teacher salaries) of the state budget is allocated for in-service teacher training, which is a professional duty in Estonia (Eurydice, Estonia, 2009). The Tiger Leap Foundation¹⁴, funded from a national budget via the Ministry of Education, is the body organising and supporting nationwide teachers' in-service training in ICT methodologies.

Using the TALIS "overall index of development need" (maximum=100), the Estonian index is at 55 (TALIS average of 53). Moreover, 28% of lower secondary teachers indicate the need for professional development in ICT teaching skills (TALIS, 2009, see Table 7). In Estonia, teachers participate in professional development on average 0.72 days/month, which is less than the TALIS (2009) average.

ICT in schools

The Tiger Leap Foundation is a specific national programme launched by the Estonian Government in 1997 to improve the quality of Estonian school education with the aid of modern ICT. Additionally, in 2008 the Ministry of Education initiated the "Laptop for Teachers" programme, in which 4,000 teachers (25% of all the teachers in the country) received a laptop. There was also a research project, "Laptop for Pupils". Despite these efforts, in the TALIS survey (2009), 27% of Estonian lower secondary schools reported that a shortage or inadequacy of computers hindered instruction.

European/international dimension of the national curriculum

European and international dimensions have been addressed in the national curriculum, but also in teachers' training curricula. As regards specific subjects, social studies and history have the closest relations with European studies. In basic school, a hidden curriculum is used for European studies where "the literature and culture of European countries are taught through the syllabus of the Estonian language and study materials include, in addition to Estonian literature, also information on writers of other countries and excerpts of their work. Foreign language syllabi contain information about names,

14 <http://www.tiigrihype.ee/>

habits and manners of communication of the country where the respective language is spoken" (Eurydice, Estonia, 2009: 207). At the upper secondary level, more variety is given to European dimensions: "[i]nformation on Europe comprise literature, geography, art, history, music, philosophy (optional course) and social study, in framework of which also important legal acts treating social relations in the EU (e.g., the Convention of Human Rights) are taught." (Eurydice, Estonia, 2009: 207)

3.3. Estonian National Support Service set-up

The Estonian National Support Service is located within the Tiger Leap Foundation. The staff consists of two coordinators, who also have other duties besides eTwinning. The main tasks of NSS are the following:

- ▶ Organising seminars, training and events.
- ▶ Providing support both by face-to-face meetings and mentoring teachers, but also through a helpdesk (e.g., phone, email, Skype).
- ▶ Evaluation of national eTwinning awards which is basis for Quality Labels.
- ▶ Coordinating eTwinning mentoring teachers' network, i.e., eTwinning ambassadors.
- ▶ Communication activities, e.g., articles, presentations, guidelines.

The eTwinning staff works in close cooperation with the *eTwinning expert-trainers* group and the *eTwinning mentoring teachers* group (i.e., eTwinning ambassadors). The *eTwinning expert-trainers* group consist of four teachers whose background is in teacher training. They all belong to the teachers' in-service training expert group within the Tiger Leap Foundation, which carries out work on the new curricula for teacher training and evaluates its outcomes. They help with various tasks such as evaluating Quality Labels, carrying out eTwinning training, working on new curricula for training, creating new study materials and help to mentor teachers when needed. In the following section we elaborate on the functions of the eTwinning mentoring teachers group (i.e., eTwinning ambassadors).

3.4 Dynamics between eTwinning and professional development

In Estonia, continuous in-service training is a professional duty and participation in eTwinning activities can give teachers a chance to present their professional development as newly acquired skills to integrate ICT within the curriculum and to manage pedagogical processes supported by ICT.

Several ways in which eTwinning and teachers' professional development interact in Estonia are:

- ▶ eTwinning in teachers' in-service training provides 4-5 training sessions per year. Additionally, at least one training session per year is targeted at advanced teachers.
- ▶ Video guidelines for beginners.¹⁵
- ▶ *Digi Tiger*¹⁶, Tiger Leap's in-service training for teachers, which consists of ten modules of face-to-face teaching (forty hours) on how to use ICT for teaching and learning processes. One of the modules is on eTwinning; the other modules include among other things new technology and creativity at kindergarten level and training for head teachers.

Moreover, the *eTwinning mentoring teachers' group* forms a network of about twenty teachers across the country (Figure 4) who are selected annually to support eTwinning. Their task is to encourage teachers in nearby schools to take part in eTwinning actions. This happens through various peer-to-peer activities (e.g., on subject bases) and sharing best practices in the pedagogical use of ICT and pedagogical school projects. They also support beginners with their first steps on the eTwinning Portal and to create and run eTwinning projects.



Figure 4. eTwinning mentoring teachers' network in 2010 covers the whole of Estonia

An important element to encourage the eTwinning mentoring teachers' network is the award system through which the participating mentors can collect points for their mentoring activities. The mentoring teachers are paid according to their points twice a year, but these points can be used towards career credits, if the mentor desires to become a senior teacher or teacher methodologist.

¹⁵ <http://sopruskoolid.blogspot.com/2010/03/videojuhendid-etwinningu-portaali.html/>

¹⁶ Estonian Digi-Tiger: <http://sopruskoolid.blogspot.com/search/label/juhendid>

The following scale is used:

- ▶ Mentoring eTwinning project work: 15 points
- ▶ eTwinning training (max. 2 per year): 7 points
- ▶ Article about the project and eTwinning activities in national or local media: 7 points
- ▶ Presentation in local workshops, conferences, meetings etc.: 5 points
- ▶ Producing guidelines: 5 points.

The first national eTwinning seminar in Estonia took place in September 2005 and hands-on training in March 2006¹⁷. The Estonian NSS estimates that at the beginning of eTwinning, it was easy to provide training to new teachers that prompted them to register on eTwinning. However, starting an eTwinning project proved harder. Since the beginning of the school year 2007-2008, when the Estonian NSS started the mentoring network and peer-to-peer activities, the number of projects has also increased. Partly, the NSS attributes their success in eTwinning to an excellent network of teachers supported by a good mentoring programme. This translates into activities such as experienced teachers taking a “newbie” along to eTwinning seminars and training. On the other hand, the small size of the country allows many face-to-face workshop and training sessions that allow real interaction with teachers, as well as coaching them in planning eTwinning projects, etc. More importantly, in Estonian teaching culture, being an innovative teacher also makes one popular among colleagues and pupils.

17 http://sopruskoolid.blogspot.com/2006/04/teine-internetiphiste-tvah_114630331646039504.html

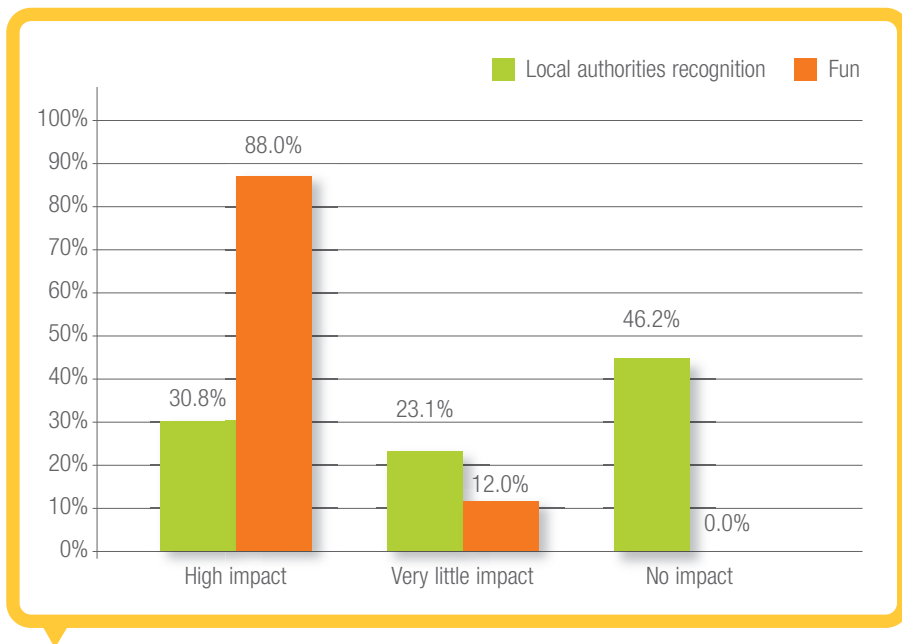


Figure 5. eTwinning drivers in Estonia (data from Crawley et al., 2009)

According to the feedback from the Estonian NSS, teachers praise eTwinning for personal contacts with colleagues, its social network of teachers and pupils in Estonia and across Europe and for the absence of bureaucracy. Lastly, Figure 5 shows that a majority of Estonian teachers (88%) think that eTwinning being “fun” has an impact on their teaching practices. As for the impact of local authorities’ recognition, the Estonian NSS thinks that the high percentage of “no impact” is due to the fact that they have very little to do with teachers’ direct work.



Poland

Chapter 4

4.1 A Polish eTwinning story

In general, eTwinning is still considered a novelty among teachers in Poland. Not only do participating teachers consider it fun, but it also gives them an opportunity to improve their language and communication skills and to gain new insight into new methodologies for using ICT in their teaching. European collaboration is also motivating for pupils. Anna, an English teacher from Poland, will participate in an eTwinning event abroad. She likes eTwinning because she thinks her pupils are better motivated in using the language when it's in a real situation.

Anna is currently applying for the third degree of a professional teacher promotion. At this stage of her professional advancement, she needs to demonstrate to the qualification committee that, among other things, she has developed certain methods of work and ICT skills. She plans to use her current eTwinning project as a demonstration of that. So even if she thinks eTwinning is fun and motivating, it's important that she can also use the project, its planning, the process and outcomes – different materials and documents – to demonstrate her newly acquired skills. It is undoubtedly an enormous benefit for the teacher that documentation created during an eTwinning project can be used for the purposes of professional advancement. eTwinning, of course, is just one of many possibilities that can be used for this purpose.

One of Anna's colleagues in another school, an eTwinning Ambassador, has already completed her career advancement programme, but still loves to participate in eTwinning – she finds that thanks to eTwinning, there is more interest in her teaching job from outside the school – from parents and other teachers. And thanks to the language skills she has gained through running eTwinning projects, she also gets some new tasks in her school. Recently she helped prepare a meeting with teachers from European schools who visited the municipality.

The regional coordinator for Anna's region, who is based at the Educational Inspectorate, selected Anna to participate in the eTwinning Professional Development Workshop

abroad. First though, she needs to get permission from the school head. Thankfully, for this, she only needs to show the invitation from her NSS and then not much more paperwork is needed. It is the school head who gives a teacher formal permission to participate in any eTwinning event which takes place outside school.

Normally, the pedagogical director in Anna's schools takes care of arranging a substitute for the day that Anna is absent and it can be paid for by the municipality that governs the schools, but this time the replacement is done by another English teacher from the same school. The classes are merged and no extra pay is needed. This is normal; there is a certain amount of reciprocity among teachers for "colleague replacement". This way, the problem is taken away from the school head.

4.2 Educational landscape

The Polish population is approximately 38,000,000 inhabitants, of which 38.7% were under the age of 29 years in 2008. According to Eurydice (2008/09), the territorial organisation of the Polish state assures the decentralisation of the public authorities. In Poland, only national educational policy is developed and carried out centrally, while the administration of education and the running of schools and educational establishments are decentralised. This means that the Minister of Education is responsible for the whole system of education and that the core curriculum for compulsory teaching, which is the same for all pupils, is created centrally. The Ministry of Education has a list of approved textbooks that the schools can choose, but teachers in Poland are free to choose their teaching and assessment methods. The development of their own curricula is accepted, but they should be submitted to the Ministry for approval (Eurydice, 2009). The Ministry of Education also has the main role in ICT integration and in setting and financing national ICT projects for schools (Insight, 2003).

On the other hand, decentralisation means that the country is divided into 2,478 "gmina" that fulfill the needs of the local community in terms of education, health services, social security and culture. They run the schools for compulsory full-time education (from age 6 to 16 years). Moreover, public teacher training, in-service training centres and pedagogical libraries are run by sixteen self-governing regional-level bodies called "Województwo". They are also the bodies responsible for pedagogical supervision (Eurydice, 2009: 28). Teacher training standards stipulate that teachers should undergo professional training, be competent to teach two subjects, be computer literate and have a good command of a foreign language (Eurydice, 2009: 6).



Teaching as a career and in-service training

The Teachers' Charter (1982, amended in 2004) is a law regulating the rights and obligations of teachers i.e., employment regulations, remuneration, working conditions, professional advancement, pension entitlement and health insurance. Within the Polish education system, there are four categories in the teaching career that are the basis for teachers' professional promotion, employment status, financial rewards and retirement. In-service teacher training is not obligatory, but it is indispensable for teachers' promotion. According to Eurydice (2009:6), in the school year 2007/08 there were 490,500 full-time teachers in Poland, who were at the following different levels of their professional career:

- ▶ Trainee teacher (5.6%)
- ▶ Contract teacher (17.3%)
- ▶ Appointed teacher (39.4%)
- ▶ Chartered teacher (37.7%)

The first year of a teacher's employment is spent as a "trainee teacher". The following three years are as a "contract teacher". The salary differences are noticeable; a chartered teacher can earn up to 84% more than a trainee teacher (Eurydice: 158).

The path to promotion is considered relatively difficult for teachers and it takes about nine years to go through all the levels. To obtain the required qualifications for promotion and to move from one level to another there are various conditions, for example, undergoing a trainee period with a positive assessment, passing an exam or obtaining acceptance by the qualification commission. In Poland, demonstrating that the teacher has run or participated in an eTwinning project or in professional development workshops can be used to count towards professional promotion. In part 4.4 below, "Dynamics between eTwinning and professional development", this aspect is further elaborated.

As regards in-service training, the following two types are available (Eurydice: 154):

- ▶ Complementary education, which leads to additional qualifications.
- ▶ Staff development, which is more to enrich working techniques within the qualifications that they already have.

In-service teachers who upgrade their qualifications have the right to take paid training leave in order to attend classes and prepare for examinations, and they can also be granted short breaks to participate in conferences, seminars and training workshops (Eurydice: 160).

Using the TALIS “overall index of development need” (maximum=100), the Polish index is at 49 (TALIS average of 53). Moreover, 22 % of teachers of lower secondary education indicate they have a “high level of need” for professional development of their ICT teaching skills (overall average 24.7%, see Table 7). In Poland, on average, teachers participate in professional development 1.44 days/month, which is clearly more than the average in TALIS (2009).

ICT in schools

In all types of schools in Poland, ICT is integrated into the curriculum as a separate subject. It can also be integrated into other subjects, in which case its implementation depends on the teachers’ skills and the availability of technology within the school. (Insight, 2003). Shortage or inadequacy of computers for instruction hinder instruction “a lot” or “to some extent” in 35.8% of Polish lower secondary schools (TALIS, 2009).

European/international dimension of the national curriculum

Since 2002, the core Polish curriculum has had a European dimension and a new regulation came into force from the 2009-2010 school year (Eurydice: 218). For example, in primary education, one of the goals is that “children become acquainted with images of children’s life in other countries”, and at lower secondary level, “2 out of 8 cross-curricular themes are related to the European dimension in education”; at upper secondary level, more complex themes are addressed, such as “the European integration process in the light of history: factors of integration and disintegration. Poland and Poles in the process of building the united Europe.”

4.3 Polish National Support Service set-up

The eTwinning NSS in Poland is based within the Foundation for the Development of the Education System¹⁸. The Foundation, which is a National Agency for Lifelong Learning Programme, is also responsible for a number of other European Union programmes such as the Youth in Action Programme, Erasmus, Comenius, Leonardo da Vinci and Eurodesk, to mention but a few. Approximately 150 people work for the Foundation, which is located in Warsaw.

A particularity of the Polish NSS is an extended network of 56 regional eTwinning representatives who work in close collaboration with the NSS (Figure 6). Each of these representatives has their own role independently of eTwinning, but with eTwinning they have undertaken additional remunerated tasks. They are based in the different Polish regions and have tasks related to their role:

18 <http://www.frse.org.pl/>

Teachers' professional development

- ▶ 26 Ambassadors: these are teachers experienced in eTwinning who work in schools in different Polish regions;
- ▶ 16 Coordinators: they are employees of the Regional Educational Inspectorates and additionally carry out some tasks for eTwinning;
- ▶ 14 Promoters: they are employees of Teacher Training Institutions and additionally carry out some tasks for eTwinning.

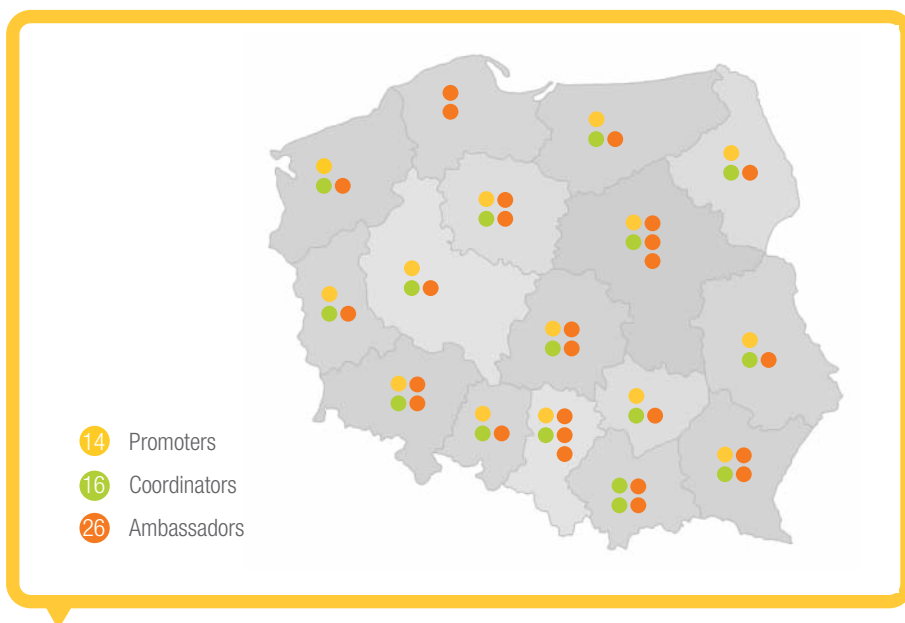


Figure 6. The Network of 56 Regional Representatives in 16 Polish Regions

There is an annual regional representatives meeting where regional activities throughout the school year are planned. These include, for example, responsibility for promotion of eTwinning in teachers' meetings, organising conferences and workshops, cooperating with local media and promoting the eTwinning action through the webpages of regional bodies (e.g., regional educational inspectorates and teacher training institutions). Some include rather prescriptive rules, such as organising five eTwinning events in a school year or choosing participants in Professional Development Workshops. On the other hand, the NSS supports them in various ways, e.g., by providing training and promotional materials at all regional conferences and events. Apart from the network of regional representatives, there is also a group of fifteen online course trainers responsible for online teacher training.

4.4 Dynamics between eTwinning and professional development

The power of the regional representatives network manifests itself in the fact that during the school year 2009-2010, approximately every second day there was a regional event somewhere in Poland. During the previous school year 2008-2009, 107 regional workshops and conferences were organised, in which 3,130 eTwinners took part. Apart from regional events, national ones take place (e.g., each year roughly 700 teachers participate in two national thematic conferences and an annual conference). The first NSS-organised event took place in Poland in December 2004, and in February 2005 the first regional conferences were organised by NSS members. Since September 2006, regional eTwinning representatives have organised conferences in their regions.

However, for scaling-up, online courses are important. The first online eTwinning course in Poland took place in September 2006. More recently in 2010, a ten-week online course took place for 60 groups, with 1,200 participants, to learn about the topic, *how to participate in eTwinning*. To successfully complete the course, it took participants some five to seven hours of work per week to do their homework. Importantly, this type of online course results in a certificate, which can be used in teachers' professional promotion. Another recently started initiative (May 2010) is weekly workshops called *eThursdays*. They take place every Thursday on the premises of the Polish NSS and target beginner teachers in eTwinning, covering hands-on sessions for registration of teachers and schools, eTwinning tools (e.g., partner finding, TwinSpace, Project Diary, National and European Quality Labels). These sessions also result lead to a certificate of attendance. In 2010, over 100 teachers participated in eThursdays workshops.

Apart from the NSS organised and supported events, courses and training opportunities, running and participating in eTwinning projects can be used by Polish teachers for their in-service training, both to gain qualifications and advance their careers, and also to enrich their working techniques within the qualifications that they already have. For example, the third level, *Appointed teacher*, has to demonstrate competences in the use of ICT. eTwinning clearly helps with this and can motivate teachers to get involved. Moreover, at the 4th level, teachers must demonstrate activities that develop their "methods of work" and ICT skills. This includes drafting and implementing an educational programme where pedagogical aims, methods and activities are detailed. It is not unusual that an eTwinning project is used for this purpose.

ICT is also mentioned in terms of sharing one's knowledge with other teachers, e.g., to run open lessons where teachers at a lower level in their teaching career can come and observe the lessons conducted by more experienced teachers. Another popular way of sharing is to provide different types of training or consultation to teachers in the same



Teachers' professional development

school, e.g., after participating in an eTwinning contact seminar or professional development workshop, teachers are expected to share this knowledge in teachers' pedagogical meetings, which take place four to five times a year.

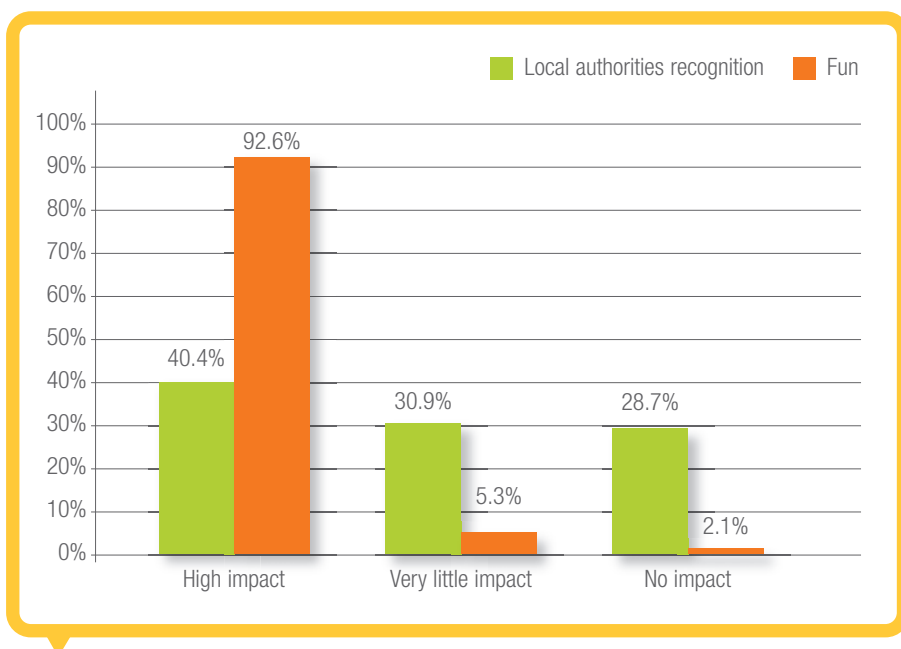


Figure 7. Drivers for eTwinning in Poland (data from Crawley et al., 2009)

In the survey conducted in 2008 (Figure 7), teachers were asked, among other things, about the effect of the eTwinning project on their teaching and other issues, such as how important was the recognition from the local authorities or whether “it was fun”. As shown in Figure 5, in 2008, 40% of the Polish respondents thought that recognition from local authorities had an impact on participating in eTwinning, whereas for 29% that it had no impact. The vast majority in Poland (93%) considered “fun” an important driver for participating in eTwinning.



Spain

Chapter 5

5.1 A Spanish eTwinning story

Marta has been working for six years as a teacher in one of the autonomous communities in Spain. Teachers' professional development is not mandatory in Spain, but to keep developing her skills as a teacher, she participates in various professional development activities. Through these activities, Marta can collect credit points that help for promotions, but also for a salary increase, for which in her autonomous community, six credit points every six years are needed.

She first heard about eTwinning through a national online course that is offered in collaboration with the online teacher training department within the Ministry of Education. There were more than thirty other online courses available, but the international aspect of eTwinning intrigued her. The course lasted for two months and she learned to understand the pedagogical principles of eTwinning, to design an eTwinning project and to manage the variety of eTwinning tools. The course was valued at four credits for her career advancement. Since the course, Marta has registered on the eTwinning Portal and put a project up in the partner-finding forum.

Within her autonomous community, an eTwinning regional event was organised where she heard about Professional Development Workshops (PDW) at European level, and she was selected to participate. With the invitation letter from the Spanish NSS, she had no problems in being authorised to attend by her local education authorities. Marta was able to make some switches with her colleagues in the school who took over her lessons while she was away, which was also approved by the school head.

On her return, the Spanish NSS asked Marta to publish a summary about her trip on a blog. She also had a session during the subject-based teachers' group in her school to explain more about the PDW. Her colleagues were interested in hearing about her trip, as she is known to be a hard-working teacher who always likes to share her experiences



with others. Her pupils are also excited, as they are looking forward to the start of the new eTwinning project.

5.2 Educational landscape

The Spanish population is approximately 46,000,000 inhabitants, of which 33.72% were under 29 years in 2008. The immigration rate is around 11% of the population. There are seventeen autonomous communities and two autonomous cities. Spanish is the official language of Spain, however, co-official languages exist. The most populated autonomous communities are Andalusia, Catalonia, the Community of Madrid and the Valencian Community.

The Spanish system has executive and legislative bodies at the national, regional (autonomous communities) and local (municipalities and provinces) levels. The Spanish Constitution decrees that the State is solely responsible for a range of matters, whereas other competences may be transferred or delegated to other levels of administration. This means that management and legislation regarding the education system have been transferred to the autonomous communities (Eurydice, Spain, 2008/9: 11-12).

The Act on Education, which was fully implemented in 2009-2010, establishes the minimum core curricula at the central government level for compulsory education and the central body is also responsible for international cooperation in education (Eurydice, 2009: 2). Curriculum development continues with the autonomous communities, which develop the core curriculum to establish their own curriculum. Additionally, each school adapts this basic curriculum to its own context. Finally, each teacher will adapt it based upon pupils' requirements, although some general directives exist, e.g., an interdisciplinary approach in primary education and integration of ICT resources in lower secondary. Schools have the freedom to choose their own resources (Eurydice, 2009: 4).

The autonomous communities have executive and administrative powers which allow them to administer the education system within their own territory (e.g., staff management and educational inspection). Local administrations, on the other hand, are responsible for school buildings and their maintenance and for monitoring compulsory education (Eurydice, 2009: 2).

Teaching as a career and in-service training

Teaching staff in publicly-funded schools, usually have permanent civil servant status. Teaching posts are allocated through a selection process that involves competitive examinations. The Ministry of Education and the unions have started negotiations to draw up the first Statute of Non-university Teaching Staff in the Civil Service with the objective of clarifying existing regulations by the provision of a career-based professional model (Eurydice, 2009: 15).

In Spain, teachers can accumulate career credits that are used for job promotion (e.g., to become an inspector), to apply for special posts, to change their post to a different town or autonomous community and for salary increases, which are possible every six years. For this, teachers must accumulate a certain number of credits, which varies from one autonomous community to another (D. Rojas, personal communication, 18-20 May, 2010). eTwinning projects and participation can in some cases be used for this, as further elaborated in Section 5.4.

For in-service training purposes there are various possibilities; for example, online teacher training courses that are organised by the Ministry of Education using an online training platform. In some cases, there is coordination with autonomous communities, mainly regarding data validation and certification. There is a catalogue of some fifty online courses on topics such as ICT tools, negotiation in the classroom, collaborative work, use of an English teachers' digital resources repository called MALTE or other resource banks like JClic. These online courses last for two months and are worth a certificate and three to four credits. Since 2000, nearly 90,000 teachers have participated in these courses.

Using the TALIS “overall index of development need” (maximum=100), the Spanish index is at 49 (TALIS average of 53). Moreover, 26 % of teachers of lower secondary education indicate they have a “high level of need” for professional development of their ICT teaching skills (overall average 24.7%, see Table 7). In Spain, on average teachers participate in professional development 1.43 days/month, which is clearly more than the average in TALIS (2009).

ICT in schools

Autonomous communities are responsible for the promotion of ICT in schools. In primary and secondary education, ICT is considered a transversal competence and is covered in all subject areas. In the secondary level, it can also be selected as an optional topic.

The Ministry of Education coordinates some initiatives at the national level in collaboration with autonomous communities, such as a repository for digital resources, Proyecto Agrega, and Escuela 2.0, which aims at pedagogical integration of ICT into school life. This



includes, for example, an initiative to equip each fifth grade pupil with a notebook and their classroom with whiteboard and wireless connection (Insight, Spain, 2009). Shortage or inadequacy of computers for instruction hinders instruction “a lot” or to “some extent” in 41% of Spanish lower secondary schools (TALIS, 2009).

European/international dimension of the national curriculum

There is a need to open the Spanish education system up to the world; thus, learning foreign languages, increasing mobility and exchanges and strengthening European cooperation are objectives contained in the 2006 Act on Education, which have been reflected in the new core curriculum. This includes, for example “social and citizenship competence, which is the competence most directly linked to the European and international dimension of education” (Eurydice, Spain: 444). As for the secondary level, the goals are more complex and more subject focused, covering areas from language learning to history and civics.

5.3 Spanish National Support set-up

The Spanish NSS functions under the Ministry of Education and is part of the Institute of Educational Technologies (ITE) where, among other things, online teacher training and digital resources are handled. As education is highly decentralised in Spain, the Spanish NSS works closely with regional education authorities, which are responsible for teachers. A work group has been formed where representatives of all autonomous communities (including Melilla and Ceuta) and the NSS staff meet three times a year to discuss the main eTwinning actions and policies. The division of the work is the following:

- ▶ Actions carried out directly by the NSS (with the collaboration of autonomous communities): national campaigns and contests, support, communication with the CSS and other NSS, online teacher training, bilateral and multilateral workshops.
- ▶ Actions carried out by NSS and autonomous communities together: Quality Label evaluation, data validation of registration and projects, promotion activities.
- ▶ Actions carried out by autonomous communities (with the collaboration of NSS): teacher training activities, selection of Professional Development Workshop attendants, promotion activities.

The NSS staff in Spain consists of a “core team” of eight educational advisors and five interns working full time. Their tasks are assigned on a yearly basis and rotated the year after to maximise knowledge sharing within the team. In addition, a variable number of advisors work part time sharing duties with other departments (e.g., technical department). All the advisors are teachers seconded for the given post on a yearly

renewable secondment. For additional tasks, for example to tutor an online course, some experienced teachers are used.

5.4 Dynamics between eTwinning and professional development

As explained above, teachers in Spain can accumulate career credits throughout their career, even if professional development as such is not mandatory. Many Spanish teachers who do not need credits take courses just for self-improvement and to show that they have gained new competences. An important aspect of career credits is that they are needed for promotion, a better salary and to acquire special posts. As there is a wide choice of courses available, teachers have the opportunity to choose those that are of interest to them, even if they are not formally needed.

There is a wide range of professional development activities that can be used to gain credit points that are given by autonomous communities. Recently, various eTwinning actions have been added to the panoply and have been registered for credits by the educational authorities. At the moment eTwinning projects, the professional development online¹⁹ course on eTwinning and some bilateral workshops can be accredited. eTwinning PDWs at European level are not accredited as they should first be registered for credits by the educational authorities.

eTwinning projects are recognised as work groups, a type of self-training activity for teachers, in schools under the competence of the Ministry of Education (i.e., Melilla, Ceuta and Spanish schools abroad) and in some autonomous communities. Currently, ten autonomous communities and the Ministry of Education (for Ceuta, Melilla and schools abroad) give career credits for participating in eTwinning projects; however, they vary in number and type of credits given. The Spanish NSS is encouraging the autonomous communities to start giving career credits for eTwinning projects. The Ministry of Education model of credit recognition, which is presented below, is offered as a possible model to follow. The credits vary from one to five points depending on the length and quality of the project and the role of the teacher:

19 Spanish online teacher training course translated into English: www.etwinning.es/curso_en

- ▶ 1-3 month eTwinning projects: 1 credit for partnering the project; 2 credits for coordinating the project (only one per school); 3 credits for the coordinator if the project is awarded a Quality Label.
- ▶ 3-6 month eTwinning projects: 2, 3, 4 credits respectively for the above tasks.
- ▶ 1 year eTwinning projects: 3, 4, 5 credits respectively for the above tasks.
- ▶ eTwinning projects longer than 1 year: in this case each year will be considered a different project.
- ▶ Online professional development course on eTwinning: 4 credits can be accumulated. Already more than 3,600 teachers have completed the eTwinning-specific course.

In the survey conducted in 2008 (Crawley et al., 2009), teachers were asked about the effect of the eTwinning project on their teaching and other issues, such as the importance of the recognition from the local authorities or the “fun” aspect of the action. As shown in Figure 8, in 2008, 31% of the Spanish respondents thought that recognition from local authorities had an impact on participating in eTwinning, whereas for 40% this had no impact. The vast majority in Spain (92%) considered “fun” as an important driver for participating in eTwinning. The NSS estimates that in the two years since the survey, accreditation for eTwinning activities has slightly changed and this could also affect the chart. However, the NSS emphasises that eTwinning is only one option among many others to accumulate credit points, so the “fun” part of eTwinning clearly appeals to many Spanish participants.

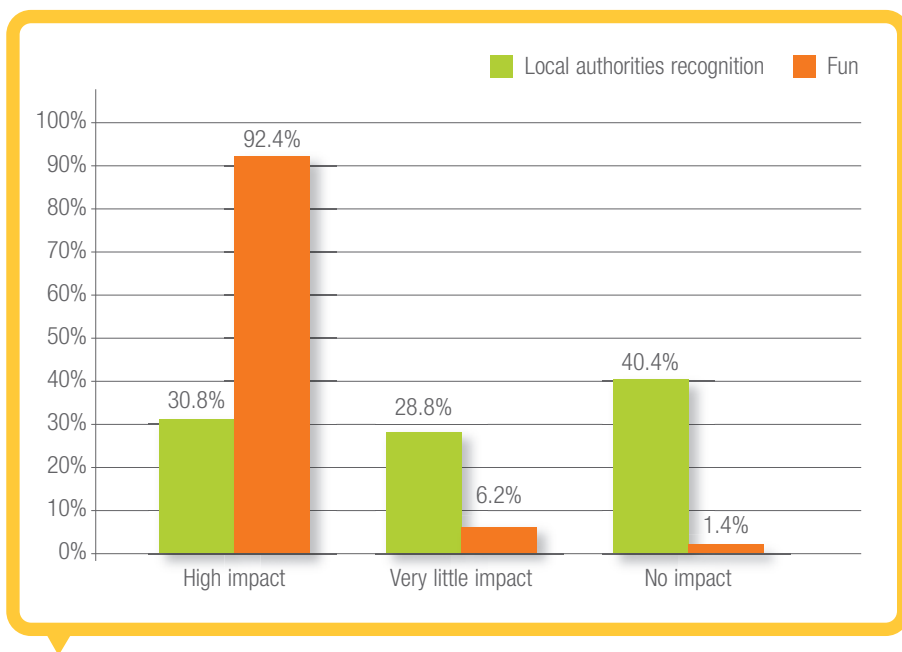


Figure 8. eTwinning drivers in Spain (data from Crawley et al., 2009)

Observations and reflections

Chapter 6

The three country overviews explore the links and synergies between the eTwinning action and teachers' professional development in the selected countries. Looking across the three, a number of key categories emerge such as motivational factors, formal recognition and accreditation of eTwinning activities, demand for professional development in general. This type of overview based on a small number of countries, however, offers only limited knowledge on the European level, as generalising results from these three countries to apply to all thirty-one eTwinning countries is impossible. The following section therefore offers observations and reflections on the topics discussed, rather than giving categorical answers.

6.1 Framework conditions

From the *educational landscape* sections of each overview, it is observed that several positive framework conditions exist in each of the countries studied. For example, in each of the countries, teachers' career paths consist of different stages where promotion from one stage to another is related to a professional development activity. Even if professional development as such is not a professional duty in Spain and Poland, it is necessary for this type of promotion. Additionally, the curriculum in each country has a European dimension, which can indicate the benefit of project work at the European level.

Moreover, there is a demand for professional development in all participating countries. We have used the TALIS "Index of development need", which is derived from aggregating the development need for each teacher over all aspects of their work (TALIS, 2009: 62). Among the countries in our studies, Poland and Spain had an index of 49, whereas Estonia had 55, higher than the average of 53. Teachers' ICT maturity and skills also count as underlying conditions; these can be related to the wider scale of professional development opportunities in the given country. In Poland 22% of lower secondary teachers say they have a high level of need for professional development in ICT teaching skills, whereas 26% in Spain and 28% Estonia say this (TALIS average 25%).

Concerning infrastructure and availability of computers in schools, there is more variation between the countries studied. Only 27% of teachers of lower secondary education in Estonia say that the shortage of computers hinders instruction, whereas this figure is

41% in Spain and 36% in Poland. Here, existing infrastructure programmes in each country can play a role in creating good conditions for teachers to participate in eTwinning (e.g., the “Laptops for teachers” programme in Estonia). Lastly, in all three countries the absence from school of the teachers taking part in eTwinning activities (e.g., PDWs) seemed to involve few or no administrative issues at the school level.

All these framework conditions most likely influence eTwinning and teachers’ participation in it in one way or another, but precise understanding of the dynamics is difficult to achieve from this type of study. Further research into this area could yield more precise answers on the causes and effects of different variables. In the following sections, we attempt to answer our three research questions.

6.2 What is the relationship between eTwinning and professional development?

From the country overviews of Estonia, Poland and Spain, it can be seen that there is a strong link between eTwinning and professional development in all three countries. There are many similar features, one of which is the status of eTwinning as part of formal professional development and career advancement programmes. We have seen examples of recognition and accreditation of eTwinning activities where they are built-in elements of formal professional development opportunities, e.g., participation in an eTwinning project and resources produced within a project can be used to gain career credits; eTwinning online training courses or workshops count for professional development; some ambassador-type activities can be encouraged with monetary incentives. It is notable, though, that out of twenty-eight countries for which we were able to gather the information (Table 2), it is only in seven countries (including Estonia, Poland and Spain) where eTwinning activities can be fully taken into account for formal professional development. In nine countries, the situation was the opposite: there was no link between eTwinning and formal professional development. In eleven countries, some synergies were found. Thus, we can conclude that in 58% of the thirty-one eTwinning, eTwinning can be used at least to some extent to support the goals of professional development programmes (Figure 9).

Can eTwinning be used for formal professional development purposes in your country?

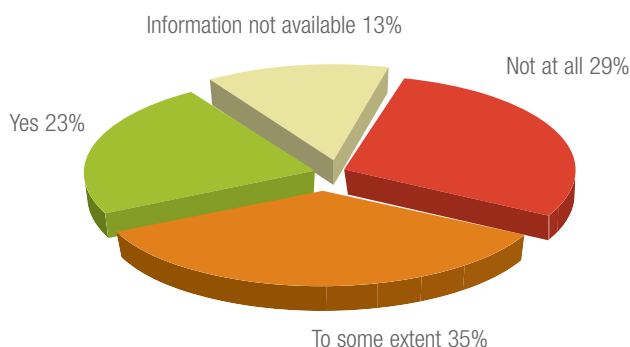


Figure 9. In 58% of the participating countries eTwinning supports the goals of professional development programmes at least to some extent.

Moreover, the country overviews allow a clearer picture to be drawn of how eTwinning interacts with both formal and informal professional development opportunities. In this case, by formal professional development we mean that the needs and goals of a national and/or local professional development programme strongly interact with eTwinning. This results, for example, in an eTwinning online course that is offered to teachers as part of the other general professional development offerings. By informal professional development we mean that teacher's involvement in an eTwinning project, for example, is recognised to support the goals of a national and/or local professional development programme, and thus participation in such a project can count towards formal recognition, e.g., career credits or advancement in the teacher's career.

	Formal professional development	Informal professional development
Formal recognition, e.g., career credits, fulfilment of professional duty	e.g., teachers who participate in an eTwinning online course provided by NSS get accredited career points.	e.g., teachers who participate in an eTwinning project get accredited career points.
Informal recognition e.g., peer recognition, intrinsic motivation	e.g., teachers' participating in formal professional development programmes become voluntary eTwinning "mentors".	e.g., peer recognition among colleagues resulting from a successful eTwinning project.

Table 5. Synergies between eTwinning and professional development

Apart from formal recognition, the value of informal recognition that teachers get from being part of eTwinning is also noted. This informal recognition manifests itself in different ways and is hard to measure. Most importantly, it seems that teachers participating in eTwinning activities can gain positive status within their own work environment (e.g., school), and also outside (e.g., parents' interest in their project). Informal recognition can also be personal self-fulfilment, for example, the satisfaction of learning new skills and perspectives through eTwinning. Moreover, informal recognition can also be translated into behaviour in the work environment. For example, it can be very easy for a teacher to participate in eTwinning because of a well-developed and active professional development culture in the school. Lastly, it can be the collegial attitude of a school head or a colleague in agreeing to arrange replacement teaching while the teacher participates in eTwinning activities outside of the school. All the eTwinning stories, which were gathered from NSS interviews as "typical" cases, also confirm this finding. These synergies are summarised in Table 5.

6.3 How does eTwinning influence and support professional development?

Using the TALIS definition of professional development as presented in the opening section (TALIS, 2009: 49), it is indicated that eTwinning can develop “individual's skills, knowledge, expertise and other characteristics as a teacher”. Notably the overviews, through the eTwinning stories and the survey findings, demonstrate that eTwinning is first of all viewed as “fun” and enjoyable. This type of intrinsic motivational factor to participate in eTwinning is important and interplays with other issues such as recognition by other colleagues and absence of bureaucracy in the process of participating.

But eTwinning is also seen as something that allows up-skilling in areas such as the use of ICT to support teaching, language learning, project management skills and other areas of personal development that can also be recognised as key competences for lifelong learning (Official Journal, 2006). Through interviews with the participating NSS, it became clear that often teachers start an eTwinning project without thinking of it as a professional development activity, but in the course of the project they realise that they are gaining new skills and competences. Thus, we can summarise that for the moment eTwinning is not a trigger for professional development, but an added value. The challenge for the future is to find the means for eTwinning to become that trigger.

6.4 How can eTwinning contribute to professional development, and vice versa?

There are interesting possibilities for eTwinning to contribute to professional development, and, vice versa, for professional development to contribute to eTwinning. As shown in the TALIS study (Figure 1), teachers perceived a high or moderate impact of different types of professional development that they had undertaken as teachers. In general, the impact ranges from 74% (education conferences and seminars) to 89% (individual and collaborative research). As shown in Section 2, eTwinning offers multiple forms of professional development opportunities, from more formal offers such as national online courses and seminars, professional development workshops and Learning Events to more informal ones, such as project work and online eTwinning Groups with like-minded teachers.

This report establishes that eTwinning has great potential to make a significant contribution to teachers' continuous professional development and lifelong learning at the European level as well as national and local level. To support that vision, eTwinning should be given recognition as the “professional development network” with plenty of

opportunities for its members to participate in “informal dialogue to improve teaching”. It is noteworthy that in TALIS (2009), both these activities rank high in teachers’ perceived impact upon their development as teachers: 80% and 87% respectively.

Moreover, the current research supports these types of informal practices: The kind of professional development a teacher participates in is more important than the amount of time invested. The net effects of days of professional development are small and only significant in a few countries, whereas indicators of participation in networks and mentoring (and in some countries also in workshops and/ or courses) have significant and stronger net associations with teaching practices in a majority of countries” (TALIS, 2009: 117).

Thus, establishing and acknowledging eTwinning as a teachers’ professional development network that gives opportunities for a variety of professional development activities could enhance eTwinning’s status among the other professional development activities on offer in all the participating countries.

6.5 New directions for eTwinning monitoring

In this study, the focus has been on the interaction of eTwinning and professional development in three eTwinning countries. The country overviews offer valuable insight into the topic in these countries and it is interesting to speculate how these results might be further investigated at the European level among the other twenty-eight countries participating.

Having emphasised eTwinning as a *professional development network for teachers*, it becomes interesting and important to gain deeper understanding of how such a network can actually support and foster teachers’ development. Especially since the concept of “eTwinning 2.0” was launched in October 2008, this shift in eTwinning has been emphasised: in addition to focusing on projects, participation in the eTwinning community and its various activities gained more importance. Not only were new social networking features made available on the eTwinning portal, but eTwinning also emerged to encompass a wide range of activities: work in groups, online meetings, workshops and conferences, and professional development activities, as documented in *eTwinning 2.0 - Building the community for schools in Europe* (Crawley et al., 2010).

Therefore, in the future, the monitoring effort in eTwinning will focus more on actual user behaviour when using the eTwinning Portal and its tools. We shall be investigating how the eTwinning platform with its push towards social networking can actually support and foster the concept of a teachers’ *professional development network*. Moreover, a set of case studies, conducted by NSS in 2010 in a number of eTwinning countries, will



complement the macro-level picture that emerges from the analysis of user behaviour and its patterns.

The question about eTwinning and its position among general professional development programmes offered by countries nonetheless still remains open. What is the driver, if any, that makes a teacher undertake eTwinning, as opposed to any other professional development opportunity? Is there any difference between the two? Or does the lack of other professional development programmes make eTwinning more attractive and allow for bridging the gap between the demand for professional development and the supply that is available? Exploring these research questions in the future would also allow a better meta-level picture of eTwinning and the possible future course(s) it can take.

Appendix

eTwinning can be used	for formal career development as a teacher	to gain better salary/more money as a teacher	as part of teachers' mandatory professional development	as part of teachers' voluntary professional development	other, please specify
Total:	7	8	5	17	1
 Austria				1	
 Bulgaria	1	1			
 Croatia				1	
 Cyprus				1	
 Czech Republic				1	
 Denmark				1	
 Estonia	1	1		1	
 France			1	1	
 Germany			1	1	
 Greece	1				
 Hungary			1	1	
 Italy					1
 Lithuania	1	1		1	
 Malta			1	1	
 Poland	1	1		1	
 Portugal	1			1	
 Romania				1	
 Slovakia		1	1		
 Slovenia		1		1	
 Spain	1	1		1	
 Sweden		1			
 UK				1	

Table 6. Different ways to leverage eTwinning for professional development



Teachers' professional development

Countries	Overall index of development need (Maximum=100)		ICT teaching skills	
	Index	(SE)	%	(SE)
Estonia	55	(0.49)	27.9	(0.91)
Poland	49	(0.50)	22.2	(0.90)
Spain	49	(0.44)	26.2	(1.08)
TALIS Average	53	(0.10)	24.7	(0.23)

Table 7. Percentage of lower secondary education teachers indicating a 'high level of need' for professional development in the following areas and overall index of need (TALIS, 2009) (SE stands for Standard Error).

Source: OECD, TALIS database.
<http://dx.doi.org/10.1787/607807256201>

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