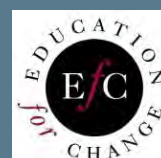




Study of the impact of eTwinning on participating pupils, teachers and schools

Final Report

Written by



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Contents

Acronyms and abbreviations	4
Executive summary	5
Résumé analytique	10
Kurzfassung	16
1. Introduction.....	22
1.1. Background	22
1.2. Methodology	24
2. The context for eTwinning	27
2.1. Introduction.....	27
2.2. Key competences for Lifelong Learning	27
2.3. Teaching, learning and innovation using ICT	28
2.4. Professional development trends	30
2.5. Teaching methods and pedagogy	32
3. Review of eTwinning data, reporting and publications	33
3.1. Introduction.....	33
3.2. Data on the extent and scale of eTwinning	33
3.3. Data on activities pursued by eTwinners and participating schools.....	36
3.4. eTwinning publications and reports.....	40
4. Main findings of the impact study	50
4.1. Building social capital and networking	51
4.2. Impact on participating teachers	57
4.3. Impact on participating pupils.....	74
4.4. Impact on participating schools.....	87
4.5. Enablers and obstacles to successful participation	94
5. Conclusions	99
5.1. Who is benefiting from participation in eTwinning and how?.....	99
5.2. What is the nature and extent of any change in local conditions because of participation in eTwinning?.....	101
5.3. What difference has eTwinning made?	102
6. Recommendations	104
6.1. Focus on quality in the eTwinning experience.....	104
6.2. Set more challenging expectations	104
6.3. Introduce learning outcomes frameworks for projects	105
6.4. Impact on the whole school	106
6.5. Focus on the pupil	106
Glossary of eTwinning terms	108
Appendix 1: The general survey: profile of respondents	110
Geographical spread.....	110
Profile of teachers	112
Age of pupils taught	112
Subjects taught by survey respondents	113
Date of registration in eTwinning	114

Appendix 2: References.....	115
Appendix 3: Groups and rooms analysis	117
About the analysis	117
The findings	118
Appendix 4: Summary of key findings from the case studies	121

Tables

Table 1: Number of case study schools selected per country and criteria used	25
Table 2: eTwinning statistics overview (from eTwinning website on 24/7/2012).....	34
Table 3: European competencies that may be developed in the scope of the eTwinning Action (taken from European Schoolnet, 2007)	41
Table 4: Model of teacher-learner relationships in move towards self-directed learning (taken from European Schoolbook, 2007)	43
Table 5: Subject coverage of respondents' current projects: percentage of total projects by age of pupils involved in project (projects can cover multiple subjects).....	75
Table 6: Where the case study schools lie in relation to the PAG model of how the teacher-learner relationship can change	86
Table 7: Number of survey responses per country.....	110
Table 8: The framework and criteria.....	117
Table 9: Summary of findings in Groups: number and nature of postings.....	118
Table 10: Summary of findings in Teachers' Rooms: number and nature of postings	119
Table 11: Example thread: a fantastic site to practise English vocabulary	120

Figures

Figure 1: Percentage of registered eTwinners involved in one or more projects (from CSS presentation of monitoring data as at 19/1/11)	36
Figure 2: Unique users logging in to the Desktop Sept/Nov 2011 (from CSS presentation at 31/12/11).....	37
Figure 3: Web analytics: Desktop 2010/2011 (from CSS presentation 31/12/2011)	38
Figure 4: eTwinners use of social networking tools, divided by eTwinners with projects and without. Snapshot from February 2012 (from Vuorikari & Scimeca, 2012).....	38
Figure 5: eTwinners engagement on the portal disaggregated by the year of registration. February 2012 (from Vuokari & Scimeca, 2012).....	39
Figure 6: The evolution of eTwinning from project to more diversified professional development (from European Schoolnet 2011b p 5)	46
Figure 7: Percentage of survey respondents who became involved (now or in the past) in an eTwinning project as a result of participating in an eTwinning professional development event	52
Figure 8: Percentage of registered schools per country that have been or are currently involved in an eTwinning project	54
Figure 9: Wider community involvement in eTwinning activities.....	55

Figure 10: Expectations of eTwinning: whether or not fulfilled by experience (% of respondents)	57
Figure 11: Perceived advantages to teachers of eTwinning: all survey respondents	59
Figure 12: Perceived advantages to teachers of eTwinning: those in projects and those not involved in a project	61
Figure 13: Participation in non-project activities: teachers currently in a project and teachers currently not in a project (1 didn't know they exist – 5 very active and engaged, regularly contribute)	62
Figure 14: Teachers' expectations of eTwinning that had not been fulfilled and year of starting with eTwinning	63
Figure 15: Perceived advantages to teachers of eTwinning and year of starting in eTwinning	64
Figure 16: Recognition or change of status because of eTwinning and year of starting in eTwinning	65
Figure 17: Disadvantages of eTwinning and year of starting in eTwinning	66
Figure 18: Whether teachers have involved other colleagues in eTwinning	68
Figure 19: Participation by survey respondents in eTwinning professional development events	69
Figure 20: Percentage of respondents using/not using social networking and professional development tools	71
Figure 21: Agreement by survey respondents with statements about social networking tools on eTwinning platform (1 disagree strongly – 4 agree strongly)	72
Figure 22: Recognition of eTwinning work among survey respondents	73
Figure 23: Ranking of eTwinning project outcomes by pupils interviewed in case study schools (1 low – 10 high)	74
Figure 24: Ways that pupils collaborate and communicate online in a project	76
Figure 25: Involvement of pupils in decision-making in projects: do pupils.....?	77
Figure 26: Teachers' views of impact of eTwinning on schools: mean score 1 no impact at all – 4 significant impact	88
Figure 27: Teachers currently involved in a project and involvement of other colleagues	90
Figure 28: Schools becoming involved in Comenius school partnerships since starting with eTwinning (% of respondents)	92
Figure 29: Reasons why teachers do not get involved in eTwinning: views from eTwinning teachers currently in a project and those currently not in a project	94
Figure 30: Disadvantages of being involved in eTwinning: views from eTwinning teachers currently in a project and those currently not in a project	95
Figure 31: Survey respondents: percentages by country, compared to percentage of total registered users by country (as at 21 May 2012)	111
Figure 32: Age of teachers responding to survey	112
Figure 33: Age of pupils taught by responding teachers	112
Figure 34: Subject area taught by respondents (multiple response)	113
Figure 35: Year of survey respondents' first involvement in eTwinning	114

Acronyms and abbreviations

CSS	Central Support Service for eTwinning
DG EAC	Directorate-General for Education and Culture, European Commission
EACEA	Education, Audiovisual and Culture Executive Agency
EC	European Commission
Elos	European Learning Outcomes Framework
EU	European Union
ICT	Information and communication technology
IPTS	Institute of Prospective Technological Studies of the JRC
JRC	Joint Research Centre of the European Commission
LLP	Comenius Lifelong Learning Programme
NSS	National Support Service for eTwinning
OECD	Organisation for Economic Co-operation and Development
PAG	Pedagogical Advisory Group of the CSS
PDW	Professional development workshop
TALIS	Teaching and Learning International Survey of the OECD

Executive summary

Introduction

eTwinning is part of the European Union's main support scheme in the field of education, the Lifelong Learning Programme (Comenius sub-programme). eTwinning focuses on taking advantage of information and communication technology (ICT) to enhance cooperation between all kinds of schools, through internet-based twinning links to develop joint projects using the tools and the secure internet spaces made available for them through the European eTwinning portal. eTwinning also provides other services to teachers, including the search for partners for Comenius school partnerships, the possibility of taking part in communities of practice, professional development workshops and online learning events.

This impact study of eTwinning is intended to contribute to the final evaluation of the LLP (2007-2013), particularly assessing impact in terms of pedagogy, teacher professional development and pupil learning, and analysing the factors that contribute to, or constrain, successful participation in eTwinning and thus the impact upon the overall effectiveness of the Comenius Programme.

The impact study gathered data and evidence over 21 months through a literature review, data and document review, completion of 24 school case studies in 13 countries, and a general survey in 25 languages of 5956 registered eTwinners.

The context for eTwinning

The report summarises the European policy on key competences that underpins the LLP and therefore Comenius, and highlights some recent research work in Europe on critical pedagogical issues that provided a framework and context for the impact study of eTwinning. These issues are: teaching and learning using ICT; professional development; teaching methodologies and pedagogy.

Review of data and documentation from eTwinning

The report presents an analysis of data and documentation generated by the Central Support Service (CSS) of eTwinning, focusing on:

- The extent and scale of eTwinning school networking and teacher participation: There has been steady growth in registration of teachers on eTwinning, as well as in numbers of other teachers who are not registered but participate in eTwinning activities.
- The activities pursued by registered eTwinners and participating pupils: in July 2012, the eTwinning website stated that there were 5,310 active projects and 18,203 closed projects; on average, 26% of individual registered eTwinners in any one country are actually involved in a project. Those not in projects may use the eTwinning platform in other ways.
- The evidence of eTwinning effectiveness and outcomes gathered by and reported on by the CSS: publications and reports need to be treated with caution as evaluative tools for a number of reasons, but the publications contain valuable information, case studies and anecdotal evidence from eTwinners and projects and these have been used by the impact study to point to areas of possible impact and to develop instruments for enquiry.

Main findings

Building social capital and networking

In both the broad and specific senses of the term, the eTwinning action has made a contribution and had an impact through the increasing scale and scope of its network of participating schools, teachers and pupils, as well as through its contribution to professional development. The eTwinning network is unique in this scale and scope and has no precedent or comparator within or outside Europe. An unquantifiable but nonetheless real impact must be assumed from this order of magnitude, evident, in social capital terms, in changes such as: decreased isolation of pupils and teachers in some countries and remote regions; greater awareness and understanding of the lives of others in different countries and peer connections through shared achievements; determination on the part of teachers and pupils to build on and retain contacts and friendships made through collaboration.

Among the main advantages of participating in eTwinning ranked by survey respondents were increased friendships and feeling part of an international community. Opportunities to collaborate, experiment with ICT and pedagogical innovation, make contacts with other professionals, and gain insight into professional, social and cultural life in other countries are elements discernible in all projects and exchanges. Engagement in eTwinning projects is where the main opportunities lie for beneficial impact on pupils themselves and schools, although better trained, more motivated and more innovative teaching staff are likely to bring direct and indirect benefits to their colleagues and the whole school. The number of actual projects (open and closed) appears to be relatively low in contrast to the number of registered eTwinners.

The eTwinning Central Support Service has been effective in managing the development and promotion of the eTwinning platform and promoting its benefits to encourage registration by teachers. Key challenges remain in ensuring that individual teachers' registration and engagement result in collaborative projects that benefit pupils and build European school networks. NSSs are relied on to promote eTwinning in their country; they provide support and assistance through email and phone calls, run local conferences and events to promote eTwinning and to contact eTwinning teachers, and work through eTwinning Ambassadors for more direct school contact. Monitoring projects in most cases relies on the Quality Label and prizes application system, but NSSs articulate increasing concern about the need for more evaluation and assessment in eTwinning projects.

Impact on participating teachers

The majority of teachers had realistic, positive expectations of eTwinning and these expectations had been largely fulfilled by their experience in eTwinning. In particular, improvements in personal knowledge, competences and skills and development of teaching skills were noted, but few teachers received any official recognition from their education authorities or any change in status as a result of their efforts in eTwinning. Teachers responding to the survey identified five main advantages of eTwinning: (i) making new friends and networking across Europe (64%); (ii) acquiring new or improved ICT skills (60%); (iii) making a positive impact on their pupils' skills or motivation to learn (55%); (iv) engendering a sense of involvement in an international teaching community (55%); (v) improving foreign language skills (54%).

Impacts were more likely to be experienced by teachers currently involved in projects; those in projects were also more likely to be active in other eTwinning activities on the platform (such as social networking activities). Getting involved in (not necessarily initiating or leading) a collaborative project appears to unlock the real potential of eTwinning to stimulate both personal and professional achievements and gains, and

encourages teachers to widen and deepen their involvement in professional exchange and networking in many different ways.

Teachers also have high expectations of positive change and improvement in their pupils' abilities, knowledge and attitudes and these expectations are generally fulfilled. Improved relationships with pupils are one of the main advantages for teachers, manifested in, for example: better and less formal communication and interaction between pupils and teacher; informal exchange of skills, pupils being often more skilled in ICT than their teacher; fun and enjoyment for both pupils and teacher in activities.

eTwinning by its nature requires project-based approaches to teaching and learning, sometimes introducing these into schools where experience of these approaches is minimal. eTwinning can contribute to the introduction of team work and a project approach or fit within and support an established culture of project-based learning.

The experience of being an eTwinner has incremental and cumulative positive impacts, showing that those with more years in eTwinning are able to get more out of the programme: contacts have been built, project experience begins to pay off and potential partners may already be in place for new projects. Experienced eTwinners also tend to have more realistic expectations, and are more likely to gain local or national recognition and status from their activities. Most teachers did not report establishing better relationships with colleagues within the school as a benefit of eTwinning. Typically, collaboration within schools tends to be 'coordination' of teachers by the main eTwinner to participate in pre-determined project activities within their classes, and the transfer of expertise (typically ICT expertise) from the one or two eTwinners to the other teachers.

Opportunities for informal dialogue, exchange of ideas and personal skill development, particularly in collaborative eTwinning projects, suggest an incremental professional development impact. Only a small proportion of eTwinners were occasional or active users of the social networking and cooperative and professional development activity tools on the eTwinning platform: the majority were aware of these tools but had not used them. An indicative content analysis of Groups and Teachers' Rooms on the eTwinning platform in spring 2012 revealed a high proportion of interactions are still unrelated to eTwinning projects or teaching methods in general.

Impact on participating pupils

Impact of eTwinning on pupils comes from involvement in projects. There is no direct evidence to suggest that gains in confidence and skills by eTwinning teachers through other eTwinning engagement have an impact on their pupils outside an eTwinning context, though there clearly must be some indirect benefits over the longer term.

Case study research shows enthusiasm among pupils for continuing with eTwinning activities. In particular, pupils perceive gains in collaborative and team working and learning about other cultures, but rated improvement in using the computer lower than all other impacts due to their pre-existing confidence in using ICT tools.

Direct interaction with pupils in partner schools is still not frequent. Synchronous work by pupils in different countries appears to be unusual, constrained often by timetabling, time differences and lack of appropriately robust ICT infrastructure, and in most of the case study schools, email was the only form of online communication between pupils.

The case studies indicate that positive impacts of eTwinning projects on pupils are related particularly to pupils' feelings of empowerment or autonomy of action, especially among pupils over the age of 12. Pupils generally have considerable input to decisions about technology use, what tasks and activities to do within a project and how to undertake those tasks. They have less input to decisions about topics to be covered in the project and the countries from which their project partners might come.

The Pedagogical Advisory Group (PAG) of the CSS defined the European competences and other attributes that contributed to the pedagogical landscape for the eTwinning Action. Case study examples in the impact study show marked correlations with these European competences, including basic knowledge of Europe and the European Union, ability to study and work in heterogeneous European groups, ability to communicate in foreign languages, and digital competences. In addition, correlations were found with aspects of collaborative learning, authentic learning, use of ICT, changes in the pedagogical relationship between teacher and learner, and active participation by pupils.

Impact on participating schools

Broadly speaking, the study indicates that if eTwinning is to have an impact on the whole school, the head teacher needs to be closely involved, if not the driving force behind eTwinning activities, or there has to have been engagement in international projects involving several classes or even the whole school, or synergy with other interventions such as a Comenius school partnership. In most schools, collaboration tends to be restricted to 'coordination' of teachers by the main eTwinner to participate in pre-determined project activities within their classes, but the school community is, in most cases, kept well informed of eTwinning activities. eTwinners active in projects are much more likely to involve others in eTwinning activities than those who are registered but not currently involved in a project.

It appears that curricular integration of project activities is the norm, even when project work *per se* is not integrated into lesson time. Typically eTwinning projects might combine elements of language learning and literacy, ICT (as a curriculum subject or skill set), sciences and mathematics and various social science subjects.

eTwinning provides many schools with a relatively easy and cost-effective way of beginning international cooperation work: in most case eTwinning experiences have led to other projects or a determination to develop a more international outlook within the school. In some cases, eTwinning is a welcome alternative to larger international projects, enabling international links without too much paperwork and bureaucracy.

Enablers and obstacles to successful participation

The following enablers and obstacles were found:

- Getting involved in projects: time emerges as the most significant barrier, along with a non-conducive school environment, in terms of lack of ICT infrastructure, support from colleagues and flexibility of the curriculum.
- Time and appreciation for their efforts: the extra time and energy required to run projects are generally not compensated for, recognised or rewarded.
- Professional development opportunities and support: participation in such opportunities has an impact on the motivation and enthusiasm of eTwinners, and on their teaching methods and the ways in which projects are carried out.
- Technology and the capacity to use it: good ICT infrastructure and adequate skills to use it are key enablers to projects, allowing the use of the eTwinning platform and other ICT tools in interactive and innovative ways.
- National status and recognition for teachers and schools: eTwinning activities are quite poorly integrated into national systems of accreditation and reward, and most individual teachers are not given incentives to participate in eTwinning. Most NSSs are keenly aware of this constraint on participation and some NSS staff cite as contributing factors the lack of clearly defined pedagogical aims, objectives and project outcomes that would have value and meaning within the terms of the national systems.

Recommendations

While endorsing the positive aspects of engagement in eTwinning by more schools and teachers, the recommendations of this impact study are directed mainly towards improving the experience of eTwinning for participating pupils, teachers and schools, and not towards strategies for expanding the existing reach and scale of the Action. The study recommends:

Focus on quality in the eTwinning experience

The priority for the next phase should be to focus on the quality of the eTwinning teacher's experience, though without impeding the further expansion of numbers of registered teachers. The main thrust of this refocusing should be to get more registered eTwinners to initiate and participate in school projects. The pedagogical relevance and the professional development outcomes of the social networking tools and forums in the eTwinning platform should be reinforced.

Set more challenging expectations

The low threshold for participation encourages engagement from all levels and abilities, and should continue to be promoted by the Action. However, this low threshold for entry is not to be confused with low quality: small scale or simple projects can and should have positive learning outcomes. Higher pedagogical expectations for eTwinning overall and in particular for projects should be set. In part this would mean improving the quality of learning content in new projects by setting some explicit targets and standards (e.g. examples of best project content and outcomes). The reinstatement and strengthening of the CSS's Pedagogical Advisory Group (PAG) will be a critical step in this, to provide stronger pedagogical advice and guidance and to assist the NSSs in interpreting such advice and guidance to suit local circumstances and policy priorities. Better retention of experienced eTwinners will also contribute to this.

Introduce learning outcomes frameworks for projects

As part of the move towards higher pedagogical expectations for eTwinning, and as a way to address the critical issue of lack of status and recognition of eTwinning within most national systems, one or more learning outcomes and/or competency frameworks for eTwinning should be developed. Such frameworks would set standards or criteria by which proposed eTwinning projects can be approved at national level; assist NSSs and schools to assess and monitor progress in individual projects and across all eTwinning projects in the country; enable the measurement of the impact of eTwinning in individual countries to support the case for greater recognition by national authorities of eTwinning projects and experience as positive achievements by teachers and schools.

Improve the impact on the whole school

Efforts should be directed at embedding eTwinning more effectively into the school for sustainable and school-wide impact. This could entail acknowledging and celebrating synergy with Comenius school partnerships; promoting and providing guidance to schools on getting 'cumulative impact' from successive eTwinning projects; promoting eTwinning and these 'cumulative' approaches directly to head teachers and principals; encouraging a greater focus on learning outcomes; and, ensuring better retention and active engagement of eTwinners within the school.

There is a need to re-focus the eTwinning Action and put the pupil at the centre of planning and pedagogical discussions, without risking the contravention of any national norms or embargoes. This could be through providing more and better guidance for teachers on how to engage and empower pupils, and engaging pupils in the development and improvement of the eTwinning platform and tools.

Résumé analytique

Introduction

eTwinning est une action de Comenius, sous-programme du programme de l'Union européenne "Education et Formation tout au long de la vie" (EFTLV), programme de soutien en matière d'enseignement et de formation à toutes les étapes de la vie. eTwinning consiste à exploiter les technologies de l'information et de la communication (TIC) pour renforcer la coopération entre les différents types d'établissements scolaires. En effet, des jumelages sur Internet permettent de développer des projets conjoints à l'aide d'outils et d'espaces Internet sécurisés, mis à disposition sur le portail européen eTwinning. eTwinning offre également d'autres services aux enseignants, y compris la recherche de partenaires pour des partenariats scolaires Comenius, la possibilité de participer à des communautés de pratiques, à des ateliers de développement professionnel, ainsi qu'à des événements d'apprentissage en ligne.

Cette étude d'impact sur eTwinning vise à étayer l'évaluation finale du programme EFTLV (2007-2013), en analysant en particulier les répercussions en matière de pédagogie, de développement professionnel des enseignants et d'apprentissage des élèves, et en examinant les facteurs qui entravent ou contribuent au succès d'une participation à eTwinning, et connaître ainsi l'impact sur l'efficacité globale du programme Comenius.

Pour la réalisation de cette étude d'impact, des données et des preuves ont été recueillies pendant 21 mois par le biais d'une analyse documentaire, d'un examen des données et des documents disponibles ; 24 études de cas dans des écoles de 13 pays ont été réalisées, ainsi qu'un sondage général dans 25 langues auprès de 5 956 eTwinners inscrits.

Le contexte d'eTwinning

Le rapport résume la politique européenne sur les compétences clés qui étayent le programme EFTLV et donc Comenius. Il met également en lumière certains travaux de recherche réalisés récemment en Europe sur des questions pédagogiques essentielles qui ont fourni un cadre et un contexte à l'étude d'impact sur eTwinning. Ces questions sont : l'enseignement et l'apprentissage à l'aide des TIC ; le développement professionnel ; les méthodologies de l'enseignement et la pédagogie.

Examen des données et de la documentation d'eTwinning

Le rapport présente une analyse des données et de la documentation produites par le Bureau d'Assistance Européen (BAE) d'eTwinning, qui se concentre sur :

- La portée et l'ampleur des réseaux d'établissements scolaires eTwinning et de la participation des enseignants : le nombre d'enseignants inscrits progresse régulièrement sur eTwinning, ainsi que le nombre d'enseignants qui ne sont pas inscrits, mais qui participent aux activités d'eTwinning.
- Les activités menées par les eTwinners inscrits et les élèves participants : en juillet 2012, le site Internet d'eTwinning affichait 5 310 projets en cours et 18 203 projets terminés ; en moyenne, 26 % des eTwinners inscrits dans un pays sont réellement impliqués dans un projet; ceux qui ne sont pas impliqués dans un projet peuvent utiliser la plateforme eTwinning à d'autres fins.
- Les preuves de l'efficacité et les résultats d'eTwinning rassemblées et rapportées par le BAE : les publications et les rapports doivent être traités avec circonspection en tant qu'outils d'évaluation, pour un certain nombre de raisons, mais ces publications contiennent des informations utiles, des études de cas et des témoignages anecdotiques d'eTwinners, ainsi que des faits issus de divers projets. Ces éléments ont été utilisés dans l'étude d'impact pour cerner les domaines d'impact possibles et pour développer des instruments d'investigation.

Principaux résultats

Développement du capital social et des réseaux

Tant au sens spécifique que général du terme, l'action eTwinning a apporté une contribution et a eu un impact en raison de la portée et de l'ampleur grandissantes de son réseau d'établissements scolaires, d'enseignants et d'élèves participants, ainsi qu'à travers sa contribution au développement professionnel. Le réseau eTwinning est unique à cet égard et n'est comparable avec aucun autre programme existant au sein ou en dehors de l'Europe. Un impact non quantifiable, mais bien réel, doit être reconnu étant donné l'ampleur des changements évidents en termes de capital social, notamment : la diminution de l'isolement des élèves et des enseignants dans certains pays et dans certaines régions isolées ; une plus grande compréhension et sensibilisation à la vie des citoyens des autres pays et des connexions entre pairs par le biais de résultats partagés ; une détermination des enseignants et des élèves à établir et entretenir des contacts et des amitiés nées de leur collaboration.

Selon les répondants du sondage, les principaux avantages de la participation à eTwinning découlent du renforcement des amitiés et du sentiment d'appartenir à une communauté internationale. Les opportunités de collaboration, l'expérience avec les TIC et l'innovation pédagogique, les contacts noués avec d'autres professionnels et la possibilité de participer à la vie professionnelle, sociale et culturelle d'autres pays sont des éléments observés dans tous les projets et échanges. L'engagement dans des projets eTwinning génère les meilleures opportunités pour obtenir un impact positif sur les élèves et les établissements scolaires, bien qu'une meilleure motivation, formation et innovation de la part des enseignants aient plus de chances de faire profiter directement et indirectement leurs collègues et l'établissement scolaire dans son ensemble. Le nombre réel de projets (en cours et terminés) semble relativement faible par opposition au nombre d'eTwinners inscrits.

Le Bureau d'Assistance Européen a été efficace dans la gestion du développement et de la promotion de la plateforme eTwinning, notamment en valorisant ses avantages afin d'encourager les enseignants à s'inscrire. Restent cependant des défis majeurs pour s'assurer que l'inscription et l'engagement des enseignants se traduisent par des projets de collaboration, bénéfiques pour les élèves, et par le développement de réseaux scolaires européens. Les Bureaux d'assistance nationaux (BAN) sont chargés de promouvoir eTwinning dans leur pays : ils proposent un soutien et une assistance par courriel et téléphone, organisent des conférences et événements locaux pour promouvoir eTwinning et rencontrer les enseignants eTwinning ; pour un contact plus direct avec les écoles, les BAN ont recours aux ambassadeurs eTwinning. Dans la plupart des cas, le suivi et le contrôle des projets passe par le Label de Qualité et par un système d'appel à candidatures pour des prix qui récompensent les meilleurs projets ; cependant les BAN sont de plus en plus préoccupés par la nécessité de renforcer l'évaluation et le contrôle de qualité des projets eTwinning.

Impact sur les enseignants participants

La plupart des enseignants avaient des attentes réalistes et positives à propos d'eTwinning et ces attentes ont été largement satisfaites grâce à leur expérience eTwinning ; notamment, en ce qui concerne l'amélioration des connaissances personnelles, le renforcement des compétences et des aptitudes, ainsi que le développement des aptitudes à l'enseignement ; cependant peu d'enseignants ont bénéficié d'une reconnaissance officielle de la part des autorités nationales chargées de l'éducation ou d'un changement de statut découlant de leurs efforts dans le cadre d'eTwinning. Selon les enseignants qui ont répondu au sondage, les cinq principaux avantages d'eTwinning sont : (i) se faire de nouveaux amis et bâtir un réseau à travers l'Europe (64 %) ; (ii) acquérir de nouvelles compétences en TIC ou les améliorer (60 %)

; (iii) constater un impact positif sur les compétences de leurs élèves ou sur leur motivation à apprendre (55 %) ; (iv) avoir un sentiment d'appartenance à une communauté d'enseignement internationale (55 %) ; (v) améliorer leurs compétences en langues étrangères (54 %).

Les impacts ont surtout été ressentis par les enseignants actuellement impliqués dans des projets ; les enseignants participant à un projet se sont également révélés plus enclins à participer à d'autres activités sur la plateforme eTwinning (comme des activités sur les réseaux sociaux). S'impliquer dans un projet de collaboration (pas nécessairement le lancer ou le diriger) semble débloquer le potentiel réel d'eTwinning qui stimule les réalisations et les acquis tant sur le plan personnel que professionnel et encourage les enseignants à renforcer leur engagement dans les échanges professionnels et les réseaux de diverses manières.

Les enseignants ont également des attentes élevées quant à l'évolution positive et l'amélioration des aptitudes, des connaissances et des comportements de leurs élèves, et ces attentes sont généralement satisfaites. L'amélioration des relations avec les élèves constitue l'un des principaux avantages pour les enseignants et elle se manifeste notamment par : une meilleure communication et une interaction moins formelle entre les élèves et l'enseignant ; un échange informel des aptitudes, des élèves souvent plus doués avec les TIC que leur enseignant ; de l'amusement et du plaisir pour les élèves et l'enseignant lors des activités.

Du fait de sa nature, eTwinning requiert des approches d'enseignement et d'apprentissage fondées sur des projets, et elles sont parfois introduites dans des écoles où l'expérience de ces approches reste minimaliste. eTwinning peut, soit contribuer à l'instauration du travail d'équipe et à l'introduction d'une approche axée sur la réalisation de projets, soit renforcer une culture, déjà établie, de l'apprentissage fondé sur les projets.

Être un eTwinner a des répercussions positives, progressives et cumulatives, et ceux qui participent au programme eTwinning depuis plusieurs années sont capables d'en profiter davantage : des contacts ont été noués, l'expérience dans la réalisation de projets commence à payer et des partenaires potentiels sont parfois déjà disponibles pour de nouveaux projets. Les eTwinners expérimentés ont également tendance à avoir des attentes plus réalistes et sont plus susceptibles de profiter d'une reconnaissance locale ou nationale, ainsi que d'un statut grâce à leurs activités. La plupart des enseignants n'ont pas relevé une amélioration des relations avec leurs collègues au sein de l'établissement scolaire comme étant un bénéfice direct d'eTwinning. En général, la collaboration au sein des établissements scolaires tend à s'assimiler à une « coordination » des enseignants par le principal eTwinner pour qu'ils participent aux activités d'un projet prédéterminé au sein de leurs classes, et au transfert de l'expertise (surtout en TIC) d'un ou de deux eTwinners aux autres enseignants.

Les opportunités de dialogue informel, d'échange d'idées et de développement des aptitudes personnelles, notamment lors de projets de collaboration eTwinning, suggèrent un impact progressif sur le développement professionnel. Seule une faible proportion d'eTwinners sont des utilisateurs occasionnels ou actifs des réseaux sociaux et des outils de développement coopératif et professionnel sur la plateforme eTwinning : la majorité d'entre eux connaissent ces outils, mais ne les avaient pas utilisés. Une analyse indicative du contenu des Groupes eTwinning et des Salles de Professeurs de la plateforme, réalisée au printemps 2012, a révélé qu'une grande partie des interactions n'étaient pas liées aux projets eTwinning ou aux méthodes pédagogiques en général.

Impact sur les élèves participants

L'impact d'eTwinning sur les élèves se situe au niveau de l'implication dans les projets. Il n'y a pas de signes évidents qui tendent à prouver le fait que les enseignants gagnent en

assurance et améliorent leurs aptitudes par le biais d'activités eTwinning ait un impact sur leurs élèves en dehors du contexte eTwinning, bien qu'il y ait clairement des bénéfices indirects à plus long terme.

L'étude de cas a révélé l'enthousiasme des élèves quand il s'agit de poursuivre les activités eTwinning. Les élèves soulignent l'intérêt d'eTwinning pour travailler en équipe, collaborer et apprendre des autres cultures, mais ils estiment que son impact sur l'amélioration de leurs connaissances en informatique est mineur en raison de leur expérience préexistante dans le domaine.

L'interaction directe avec les élèves des écoles partenaires demeure peu fréquente. La synchronisation du travail des élèves entre les différents pays semble ne pas être monnaie courante, car souvent entravée par la gestion des emplois du temps, des horaires différents et de l'absence d'une infrastructure informatique solide. Dans la plupart des écoles de l'étude de cas, le courriel était la seule forme de communication en ligne entre les élèves.

Les études de cas indiquent que les impacts positifs des projets eTwinning sur les élèves sont surtout liés à leur sentiment d'autonomie d'action, en particulier parmi les élèves de plus de 12 ans. Les élèves participent pleinement aux décisions quant à l'utilisation des technologies, aux tâches et aux activités à réaliser dans le cadre d'un projet et à la manière de mener ces tâches à bien. Ils sont moins consultés pour les décisions relatives aux sujets abordés pendant le projet et aux pays des écoles susceptibles d'être partenaires.

Le Groupe de Conseil Pédagogique (GCP) du BAE a défini les compétences européennes et d'autres éléments qui ont contribué au paysage pédagogique de l'Action eTwinning. Des exemples tirés des études de cas de l'étude d'impact montrent des corrélations marquées avec ces compétences européennes, notamment les connaissances de base sur l'Europe et l'Union européenne, la capacité à étudier et à travailler au sein de groupes européens hétérogènes, la capacité à communiquer dans des langues étrangères et les compétences numériques. En outre, des corrélations ont été notées avec certains aspects liés à l'apprentissage en collaboration, l'apprentissage authentique, l'utilisation des TIC, le changement des relations pédagogiques entre enseignant et apprenant, ainsi que la participation active des élèves.

Impact sur les écoles participantes

De manière générale, l'étude indique que, pour qu'eTwinning ait un impact sur l'ensemble de l'école, le chef d'établissement doit être étroitement associé, voire jouer un rôle moteur quant aux activités eTwinning, ou bien, il doit exister une réelle stratégie au sein de l'établissement pour les projets internationaux impliquant plusieurs classes, ou une synergie avec d'autres initiatives comme les partenariats scolaires Comenius. Dans la plupart des écoles, la collaboration tend à se limiter à une « coordination » des enseignants par le principal eTwinner afin qu'ils participent à des activités de projet prédéfinies au sein des classes; cependant, la communauté scolaire est, dans la plupart des cas, bien informée des activités eTwinning. Les eTwinners actifs dans les projets sont bien plus enclins à impliquer d'autres personnes dans les activités eTwinning que ceux qui sont inscrits, mais ne participent pas à un projet.

Il semble que l'intégration des activités du projet dans le programme scolaire, soit la norme, même lorsque le temps de travail généré par le projet, n'est pas intégré dans le temps consacré aux cours. Généralement, les projets eTwinning peuvent combiner des éléments liés à l'apprentissage des langues et à l'alphabétisation, aux TIC (comme matière d'enseignement ou ensemble de compétences), aux sciences, aux mathématiques et à divers sujets relatifs aux sciences sociales.

eTwinning permet à de nombreux établissements scolaires de mettre en œuvre assez facilement et à moindres frais, une collaboration internationale; dans la plupart des cas,

les expériences eTwinning ont conduit à d'autres projets ou à la volonté de développer les perspectives internationales de l'établissement scolaire; dans certains cas, eTwinning est une alternative intéressante aux grands projets internationaux, car ce programme permet de nouer des contacts à l'étranger avec un minimum de paperasserie et de bureaucratie.

Obstacles et moteurs d'une participation réussie

Les moteurs et obstacles suivants ont été notés :

- Implication dans les projets : le temps semble être le principal obstacle, ainsi qu'un environnement scolaire défavorable (manque d'infrastructure informatique, manque de soutien de la part des collègues et de flexibilité du programme scolaire).
- Temps et appréciation des efforts consentis : le temps et l'énergie supplémentaires requis pour la réalisation des projets ne sont généralement pas rémunérés, reconnus ou récompensés.
- Opportunités de développement professionnel et soutien : ce type d'opportunités a un impact sur la motivation et l'enthousiasme des eTwinners, ainsi que sur leurs méthodes pédagogiques et sur la manière dont les projets sont menés.
- Technologies et capacité à les utiliser : de bonnes infrastructures en TIC et des compétences appropriées pour les utiliser sont cruciales pour les projets, dans la mesure où elles permettent l'utilisation de la plateforme eTwinning et d'autres outils TIC, de manière interactive et innovante.
- Statut et reconnaissance au niveau national, des enseignants et des établissements scolaires : les activités eTwinning sont assez mal intégrées dans les systèmes nationaux d'accréditation et de reconnaissance, et la plupart des enseignants ne sont pas incités à participer à eTwinning. La plupart des BAN sont bien conscients de cette faiblesse et le personnel de certains BAN cite le manque d'objectifs pédagogiques, de buts et de résultats clairement définis au niveau des projets, qui auraient une valeur et une signification dans le cadre des systèmes éducatifs nationaux.

Recommandations

Tout en confirmant les aspects positifs que représente l'engagement d'un plus grand nombre d'établissements scolaires et d'enseignants dans les projets eTwinning, les recommandations de cette étude d'impact portent surtout sur l'amélioration de l'expérience eTwinning pour les élèves, les enseignants et les établissements scolaires, et non sur l'adoption de stratégies visant à élargir la portée et l'ampleur actuelles de l'Action. L'étude recommande :

Orientation sur la qualité de l'expérience eTwinning

La priorité pour la prochaine phase devrait être de se concentrer sur la qualité de l'expérience eTwinning de l'enseignant, mais sans pour autant entraver l'augmentation du nombre d'enseignants inscrits. L'objectif principal de ce recentrage devrait être d'obtenir un plus grand nombre d'eTwinners inscrits qui lancent des projets scolaires ou y participent. La pertinence pédagogique et les résultats en matière de développement professionnel dans le cadre de l'utilisation des outils de réseaux sociaux et des forums de la plate-forme eTwinning, devraient être renforcés.

Définir des attentes plus ambitieuses

Le nombre peu élevé de critères de participation encourage un engagement à tous les niveaux et pour toutes les compétences et devrait continuer à faire l'objet d'une promotion dans le cadre de l'Action. Toutefois, ce nombre peu élevé de critères ne doit pas être assimilé à une faible qualité : les projets simples ou à petite échelle peuvent et doivent avoir des résultats pédagogiques positifs. Des attentes pédagogiques plus élevées pour eTwinning en général et pour les projets en particulier, doivent être

définies. Cela impliquerait notamment d'accroître la qualité du contenu pédagogique des nouveaux projets en définissant des objectifs et des normes explicites (ex. : exemples de meilleurs contenus et résultats de projets). La réintégration et le renforcement du Groupe de Conseil Pédagogique (GCP) du BAE constitueront une étape décisive à cet égard, pour fournir des conseils pédagogiques plus pertinents et une meilleure orientation, et pour aider les BAN dans l'interprétation de ces conseils et de cette orientation en fonction des conditions locales et des priorités politiques. Parvenir à fidéliser les eTwinners expérimentés contribuera également à cet objectif.

Introduire des cadres de résultats d'apprentissage pour les projets

Dans le cadre de la progression vers des attentes pédagogiques plus élevées envers eTwinning et pour aborder le problème critique du manque de statut et de reconnaissance d'eTwinning au sein de la plupart des systèmes nationaux, un ou plusieurs cadres de résultats d'apprentissage et/ou de compétences devraient être développés pour eTwinning. Ces cadres définiraient des normes ou des critères d'après lesquels les propositions de projets eTwinning pourraient être approuvées au niveau national ; ils aideraient les BAN et les établissements scolaires à évaluer et à contrôler la progression des projets individuels et de tous les projets eTwinning réalisés dans le pays ; ils permettraient de mesurer l'impact d'eTwinning dans chaque pays en vue de plaider auprès des autorités nationales pour une meilleure reconnaissance des projets eTwinning et de l'expérience acquise, en tant qu'initiatives positives des enseignants et des écoles.

Améliorer l'impact sur l'école dans son ensemble

Les efforts devraient être axés sur une intégration plus efficace d'eTwinning au sein de l'environnement scolaire afin d'aboutir à un impact durable à l'échelle de l'école dans son ensemble. Cela pourrait impliquer de reconnaître et de mettre en exergue la synergie avec les partenariats scolaires Comenius ; de promouvoir et d'orienter les écoles pour qu'elles jouissent d'un « impact cumulatif » des projets eTwinning successifs ; de promouvoir eTwinning et ces approches « cumulatives » directement auprès des chefs d'établissement et des proviseurs ; de mettre davantage l'accent sur les résultats d'apprentissage ; et d'assurer une meilleure rétention et un engagement actif des eTwinners dans l'école.

Il est nécessaire de réorienter l'Action eTwinning et de placer l'élève au centre des discussions relatives à la planification et à la pédagogie, sans risquer de contrevenir aux normes ou embargos nationaux. Il pourrait s'agir de mieux orienter les enseignants quant à la manière de motiver, d'autonomiser les élèves et de les impliquer dans le développement et l'amélioration de la plateforme et des outils eTwinning.

Kurzfassung

Einführung

eTwinning ist Teil des wichtigsten EU-Förderprogramms im Bereich der Bildung, des Programms für lebenslanges Lernen (LLP, Comenius-Teilprogramm). Der wesentliche Schwerpunkt von eTwinning liegt auf der Nutzung von Informations- und Kommunikationstechnologien (IKT) zur verbesserten Zusammenarbeit zwischen Schulen aller Art. Über internetbasierte Partnerschaft-Links entwickeln Schulen gemeinsame Projekte mithilfe der auf dem europäischen eTwinning-Portal bereitgestellten „Tools“ und sicheren Internet-Umgebungen. Darüber hinaus bietet eTwinning Lehrern weitere Dienste, wie z.B. die Suche nach Partnern für Comenius-Schulpartnerschaften oder die Möglichkeit zur Teilnahme an praxisbezogenen Gemeinschaften, Workshops zur beruflichen Weiterentwicklung und e-Learning-Events.

Mit dieser Impaktstudie zu eTwinning soll ein Beitrag zur abschließenden Bewertung des übergeordneten Programms für lebenslanges Lernen (2007-2013) geleistet werden, insbesondere hinsichtlich der Auswirkungen auf die Pädagogik, die berufliche Fort- und Weiterbildung der Lehrer und das Lernen der Schüler. Außerdem analysiert die Studie welche Faktoren eine erfolgreiche Teilnahme an eTwinning begünstigen oder einschränken, und somit auch die Auswirkungen auf die Effektivität des EU-Schulprogramms Comenius insgesamt.

Die für diese Studie verwendeten Daten und Nachweise wurden über einen Zeitraum von 21 Monaten mittels Literaturrecherche, Daten- und Dokumentenrecherche, die Durchführung von Fallstudien (24 Schulen in 13 Ländern) und eine allgemeine Umfrage in 25 Sprachen bei 5.956 angemeldeten eTwinning-Nutzern eingeholt.

Der Kontext von eTwinning

Die Studie fasst die europäische Strategie bezüglich der Schlüsselkompetenzen von Schülern zusammen, die die EU durch das LLP und folglich auch Comenius unterstützt, und enthält Hinweise auf die jüngste in Europa durchgeführte Forschungsarbeit zu wichtigsten pädagogischen Themen, die den Rahmen und Kontext für die Wirkungsanalyse von eTwinning bildeten. Bei diesen Themen handelt es sich um den Unterricht und das Lernen mittels Informations- und Kommunikationstechnologien, die berufliche Entwicklung sowie Unterrichtsmethoden und Pädagogik.

Prüfung von Daten und Dokumentation zu eTwinning

Im Bericht wird eine Analyse der vom Central Support Service (CSS) für eTwinning erstellten Daten und Dokumente vorgestellt. Der Schwerpunkt liegt dabei auf den folgenden Bereichen:

- Ausmaß und Umfang der Schulvernetzung durch eTwinning und Beteiligung von Lehrern an eTwinning: Die Zahl der Anmeldungen von Lehrern bei eTwinning hat stetig zugenommen, ebenso die Zahl der Lehrer, die zwar nicht angemeldet sind, aber dennoch an eTwinning-Aktivitäten teilnehmen.
- den von den angemeldeten eTwinning-Nutzern und den beteiligten Schülern durchgeführten Aktivitäten: Im Juli 2012 gab es den Angaben der eTwinning Website zufolge 5.310 aktive und 18.203 abgeschlossene Projekte; im Durchschnitt sind 26% der individuell angemeldeten eTwinning-Teilnehmer in einem Land effektiv an einem Projekt beteiligt, während die e-Twinning-Plattform von all denjenigen, die an keinem Projekt beteiligt sind, u. U. auf andere Weise verwendet wird.
- den Nachweis über die Effektivität von eTwinning und die vom CSS gesammelten und gemeldeten Ergebnisse: Aus mehreren Gründen sind Veröffentlichungen und Berichte als Bewertungsinstrumente zwar mit Vorsicht zu behandeln, doch die Veröffentlichungen enthalten wertvolle Informationen, Fallstudien und Anhaltspunkte

von eTwinning-Teilnehmern und Projekten, die von der Wirkungsanalyse zum Aufzeigen möglicher Wirkungsbereiche und zur Entwicklung von Nachforschungsinstrumenten verwendet wurden.

Die wesentlichen Erkenntnisse

Aufbau von sozialem Kapital und Kontaktnetzwerken

Sowohl in ihrer breiteren als auch in der spezifischeren Bedeutung des Begriffs hat die eTwinning-Initiative einen Beitrag geleistet und dank der zunehmenden Größe seines Netzwerks beteiligter Schulen, Lehrer und Schüler sowie durch seinen Beitrag zur beruflichen Entwicklung Wirkung gezeigt. Das eTwinning-Netzwerk ist in seinem Ausmaß und seiner Tragweite einzigartig und in Europa und über seine Grenzen hinaus beispiellos und ohne Gleichen. Angesichts dieses Ausmaßes lässt sich eine zwar nicht quantifizierbare, doch reale Auswirkung annehmen, die in Bezug auf das soziale Kapital anhand folgender Veränderungen erkennbar ist: abnehmende Isolation von Schülern und Lehrern in einigen Ländern und entlegenen Regionen; ein erhöhtes Bewusstsein und besseres Verständnis für das Leben von Menschen in anderen Ländern, grenzüberschreitende Verbindungen von Schülern und Lehrern durch gemeinsame Leistungen und Erfolge sowie die feste Entschlossenheit seitens der Lehrer und Schüler, die durch die Zusammenarbeit erworbenen Kontakte und Freundschaften auszubauen und zu erhalten.

Als wichtigste Vorteile der Teilnahme an eTwinning nannten die Befragten die zunehmende Zahl der Freundschaften und das Gefühl, einer internationalen Gemeinschaft anzugehören. Elemente, die in allen Projekten und Austauschprogrammen erkennbar sind, sind die Möglichkeiten zur Zusammenarbeit, des Experimentierens mit IKT und pädagogischen Innovationen, der Kontakte mit anderen Fachkräften und der Einblicke in das berufliche, soziale und kulturelle Leben in anderen Ländern. Die Beteiligung an eTwinning-Projekten ist jener Bereich, in dem sich die meisten Möglichkeiten für eine positive Auswirkung auf die Schüler selbst und auf die Schulen bieten, wobei jedoch besser ausgebildete, motiviertere und innovativere Lehrkräfte ihren Kollegen und der gesamten Schule aller Wahrscheinlichkeit nach mehr direkte und indirekte Vorteile bringen werden. Die Zahl der tatsächlichen (laufenden und abgeschlossenen) Projekte erscheint im Vergleich zur Zahl der angemeldeten eTwinning-Teilnehmer allerdings relativ gering.

Die Zentrale Koordinierungsstelle von eTwinning (CSS) hat sich in der Leitung der Entwicklung und Förderung der eTwinning-Plattform und bei der Werbung für ihre Vorteile, um eine größere Zahl von Lehrern zur Anmeldung zu motivieren, als wirksam erwiesen. Eine wesentliche Herausforderung besteht auch weiterhin darin, dafür zu sorgen, dass die Anmeldung und Beteiligung einzelner Lehrer auch in Gemeinschaftsprojekten resultiert, die Schülern Vorteile bieten und zum Aufbau europäischer Schulnetzwerke führen. Nationale Koordinierungsstellen (NSS) sind dafür zuständig, in ihren jeweiligen Ländern für eTwinning zu werben; sie bieten per E-Mail und auch telefonisch Hilfe und Unterstützung, veranstalten vor Ort Konferenzen und Veranstaltungen zur Förderung von eTwinning und zur Kontaktaufnahme mit eTwinning-Lehrern, und sie streben über die eTwinning-Botschafter einen direkteren Kontakt zu den Schulen an. Die Projektüberwachung stützt sich in den meisten Fällen auf das Qualitätssiegel und die Verwendung von Auszeichnungen, doch die NSS melden eine zunehmende Besorgnis über die Notwendigkeit eTwinning-Projekte in höherem Maße zu auswerten und zu beurteilen.

Auswirkungen auf die teilnehmenden Lehrer

Die meisten Lehrer hatten realistische und positive Erwartungen an eTwinning, und diese Erwartungen haben sich dank ihrer Erfahrungen mit eTwinning größtenteils erfüllt. Vermerkt wurden insbesondere die Verbesserungen bei den persönlichen Kenntnissen,

Kompetenzen und Fähigkeiten sowie die Entwicklung der Lehrfähigkeiten. Jedoch erhielten nur wenige Lehrer aufgrund ihrer Bemühungen im Rahmen von eTwinning eine offizielle Anerkennung seitens der Bildungsbehörden oder erlangten einen höheren Status. Diejenigen Lehrer, die die Umfrage beantwortet haben, identifizierten fünf Hauptvorteile von eTwinning: (i) das Knüpfen neuer Freundschaften und Kontaktnetze in ganz Europa (64%); (ii) den Erwerb neuer oder verbesserter IKT-Fähigkeiten (60%); (iii) eine positive Beeinflussung der Fähigkeiten und Lernmotivation ihrer Schüler (55%); (iv) das Entstehen eines Gefühls des Eingebundenseins in eine internationale Lehrgemeinschaft (55%); (v) eine Verbesserung der fremdsprachlichen Fähigkeiten (54%).

Mit größerer Wahrscheinlichkeit waren die Auswirkungen für jene Lehrer wahrnehmbar, die zu dieser Zeit an Projekten beteiligt waren; die an Projekten Beteiligten waren auch mit größerer Wahrscheinlichkeit an anderen eTwinning-Aktivitäten auf der Plattform aktiv beteiligt (wie z.B. an Aktivitäten in sozialen Netzwerken). Die Beteiligung an einem Gemeinschaftsprojekt (jedoch nicht unbedingt die Initiierung oder Leitung eines solchen) scheint das wahre Potenzial von eTwinning zu erschließen, insbesondere persönliche und berufliche Leistungen und Erfolge anzuregen und die Lehrer darin zu bestärken, ihre Beteiligung am beruflichen Austausch und am Aufbau von Kontakten in verschiedenster Weise auszuweiten und zu vertiefen.

Auch haben die Lehrer hohe Erwartungen bezüglich positiver Veränderungen und Verbesserungen der Fähigkeiten, Kenntnisse und Einstellungen ihrer Schüler, und diese Erwartungen werden durchweg erfüllt. Zu den hauptsächlichen Vorteilen für die Lehrer zählt das verbesserte Verhältnis zu den Schülern, das sich auf verschiedene Weise auswirkt, z. B. durch eine bessere und weniger formale Kommunikation und besseren und zwangloseren wechselseitigen Beziehungen zwischen Schülern und Lehrern; durch den informellen Austausch von Fähigkeiten (Schüler haben oft bessere Computerkenntnisse als ihre Lehrer) sowie durch Spaß und Freude für Schüler und Lehrer bei den Aktivitäten.

Naturgemäß bedarf eTwinning projektbasierter Ansätze beim Lehren und Lernen, wobei diese in Schulen, in denen mit diesen Ansätzen kaum Erfahrung besteht, manchmal erst eingebracht werden müssen. eTwinning kann zur Einführung von Teamarbeit oder eines Projektansatzes beitragen oder sich in eine bereits vorhandene Kultur des projektbasierten Lernens einpassen und diese unterstützen.

Die Teilnahme an eTwinning hat schrittweise und aufeinander aufbauende Auswirkungen: wer bereits mehrere Jahre Erfahrung mit eTwinning hat, kann auch mehr aus dem Programm herausholen: Es sind Kontakte geknüpft worden, Projekterfahrungen beginnen, sich auszuzahlen, und für neue Projekte könnten bereits potenzielle Partner vorhanden sein. Erfahrene eTwinning-Teilnehmer haben zumeist auch realistischere Erwartungen und werden aufgrund ihrer Aktivitäten mit größerer Wahrscheinlichkeit mehr Anerkennung und bzw. einen höheren Status auf lokaler oder nationaler Ebene finden. Die meisten Lehrer haben nicht berichtet, dass sie dank eTwinning eine bessere Beziehung zu ihren Kollegen in der Schule aufgebaut haben. In der Regel besteht die Zusammenarbeit innerhalb der Schulen darin, dass ein "Haupt-eTwinner" die Teilnahme anderer Lehrer an vorbestimmten Projektaktivitäten in ihren Klassen „koordiniert“, oder dass ein oder zwei eTwinners ihre Fähigkeiten (in der Regel Computer-Kenntnisse) an andere Lehrer weitergeben.

Die Möglichkeiten zum informellen Dialog, zum Austausch von Ideen und zur Entwicklung persönlicher Fähigkeiten, insbesondere bei gemeinsamen eTwinning-Projekten, lassen darauf schließen, dass eine stufenweise berufliche Entwicklung stattfinden wird. Nur ein geringer Teil der eTwinning-Nutzer machte gelegentlich oder aktiv von den sozialen Netzwerken und „Activity Tools“ zur kollegialen und fachlichen Entwicklung auf der eTwinning-Plattform Gebrauch. Die meisten waren sich zwar dieser Tools bewusst, doch

haben sie nicht benutzt. Eine bezeichnende Inhaltsanalyse der „Groups“ und „Teachers’ Rooms“ auf der eTwinning-Plattform ergab im Frühling 2012, dass ein Großteil der wechselseitigen Beziehungen weiterhin keinen Bezug zu den eTwinning-Projekten oder zu den Unterrichtsmethoden ganz allgemein hatte.

Auswirkungen auf die teilnehmenden Schüler

Die Auswirkungen von eTwinning auf die Schüler resultieren aus deren Einbindung in Projekte. Es gibt keinen direkten Nachweis dafür, dass sich ein wachsendes Selbstvertrauen und verbesserte Fähigkeiten bei den eTwinning-Lehrern durch anderweitiges eTwinning-Engagement auch bei ihren Schülern außerhalb des eTwinning-Kontexts auswirkt, wobei sich jedoch ganz offensichtlich langfristig gesehen ein indirekter Nutzen ergeben müsste.

Die Fallstudienforschung hat gezeigt, dass unter den Schülern Begeisterung für eine Weiterführung der eTwinning-Aktivitäten besteht. Insbesondere sehen die Schüler die Vorteile, die sich aus der Gemeinschafts- und Teamarbeit und dem Lernen über andere Kulturen ergeben; die Verbesserung ihrer Computer-Kenntnisse bewerteten sie jedoch aufgrund ihrer Vorkenntnisse geringer als alle übrigen Auswirkungen.

Ein direkter Austausch mit Schülern in Partnerschulen ist nach wie vor selten. Das synchrone Arbeiten von Schülern in verschiedenen Ländern scheint ungewöhnlich zu sein, wobei die Stundenplangestaltung, Zeitunterschiede und das Fehlen einer entsprechend robusten IKT-Infrastruktur als die Haupthindernisse identifiziert wurden, und in den meisten der Schulen, an denen Fallstudien durchgeführt wurden, E-Mail die einzige Form der Online-Kommunikation zwischen den Schülern war.

Die Fallstudien weisen darauf hin, dass die positiven Auswirkungen der eTwinning-Projekte auf die Schüler vor allem die Übertragung von Verantwortung bzw. gesteigerte Handlungsautonomie betreffen, insbesondere bei Schülern über 12 Jahren. In der Regel leisten Schüler einen beträchtlichen Beitrag bei Entscheidungen über die Nutzung von Technologie, darüber, welche Aufgaben und Aktivitäten innerhalb eines Projekts durchgeführt werden sollen sowie zur Methodik der Durchführung. Sie haben weniger Einfluss auf Entscheidungen über die zu behandelnden Themen der Projekte und die Länder, aus denen ihre Projektpartner kommen könnten.

Die Pädagogische Beratungsgruppe (PAG) der Zentralen Koordinierungsstelle hat die europäischen Kompetenzen und sonstige Eigenschaften definiert, die zur pädagogischen Landschaft der eTwinning-Initiative beigetragen haben. Die Fallbeispiele in der Wirkungsstudie zeigen markante Zusammenhänge mit diesen europäischen Kompetenzen auf, wie z.B. eine Grundkenntnis von Europa und der Europäischen Union, die Fähigkeit, in heterogenen europäischen Gruppen zu lernen und zu arbeiten, die Fähigkeit, sich in Fremdsprachen zu verständigen, sowie digitale Kompetenzen. Außerdem haben sich Zusammenhänge mit Aspekten des gemeinschaftlichen Lernens, des authentischen Lernens, der Nutzung von IKT, der Änderungen im pädagogischen Verhältnis zwischen Lehrer und Lernenden und einer aktiven Beteiligung der Schüler gezeigt.

Auswirkungen auf die beteiligten Schulen

Die Studie weist auf eine Reihe von Faktoren hin, die Voraussetzungen für eine Auswirkung von eTwinning-Aktivitäten auf die gesamte Schule sind: entweder muss der Schulleiter eng beteiligt, wenn nicht gar die Triebkraft hinter den Aktivitäten sein, oder eine Beteiligung an internationalen Projekten unter Einbeziehung mehrerer Schulklassen oder der gesamten Schule hat bereits stattgefunden, oder es besteht ein Zusammenwirken mit anderen Initiativen wie einer Comenius-Schulpartnerschaft. In den meisten Schulen beschränkt sich die Zusammenarbeit innerhalb der Schulen zumeist darauf, dass die Lehrer vom hauptsächlichen eTwinning-Nutzer zur Teilnahme an

vorbestimmten Projektaktivitäten in ihren Klassen „koordiniert“ werden, wobei die Schulgemeinschaft in den meisten Fällen gut über die eTwinning-Aktivitäten auf dem Laufenden gehalten wird. Die aktiv an Projekten beteiligten eTwinning-Nutzer werden mit größerer Wahrscheinlichkeit andere in eTwinning-Aktivitäten einbeziehen als solche, die zwar angemeldet sind, aber gegenwärtig an keinem Projekt beteiligt sind.

Es hat den Anschein, dass die lehrplanmäßige Integration von Projektaktivitäten die Norm ist, selbst dann, wenn die Projektarbeit *per se* nicht in die Unterrichtszeit integriert ist. Typische Komponenten von eTwinning-Projekten sind z. B. Spracherwerb und Les- und Schreibkompetenz, Informations- und Kommunikationstechnologien (als reguläres Fach oder Fachkenntnis), Naturwissenschaften und Mathematik sowie diverse sozialwissenschaftliche Fächer.

eTwinning bietet vielen Schulen einen relativ einfachen und kostenwirksamen Einstieg in eine internationale Zusammenarbeit, denn in den meisten Fällen haben die Erfahrungen mit dem eTwinning zu anderen Projekten oder zu dem Entschluss geführt, internationalere Perspektiven innerhalb der Schule zu entwickeln. In einigen Fällen ist eTwinning zu einer willkommenen Alternative zu größeren internationalen Projekten geworden, die internationale Verbindungen ohne viel Bürokratie und Formalitäten ermöglicht.

Begünstigende Faktoren und Hindernisse für eine erfolgreiche Teilnahme

Es wurden die folgenden erleichternden Faktoren und Hindernisse festgestellt:

- Der Entschluss zur Projektteilnahme: Hier hat sich, neben einem abträglichen schulischen Umfeld (fehlende IKT-Infrastruktur, mangelnde Unterstützung durch Kollegen, wenig flexibler Lehrplan) der Zeitfaktor als das größte Hindernis erwiesen.
- Zeit und Anerkennung der Bemühungen der Lehrer: Die für die Projekte aufgewandte zusätzliche Zeit und Energie werden zumeist nicht vergütet, anerkannt oder belohnt.
- Berufliche Entwicklungsmöglichkeiten und Unterstützung: Die Nutzung derartiger Möglichkeiten wirkt sich auf die Motivation und Begeisterung der eTwinning-Nutzer sowie auf ihre Unterrichtsmethoden und die Methode der Projektdurchführung aus.
- Technologie und die Fähigkeit, diese zu nutzen: Eine gute IKT-Infrastruktur und die entsprechenden Fähigkeiten, sie zu nutzen, sind die wichtigsten begünstigenden Faktoren für eTwinning-Projekte und ermöglichen die Nutzung der Plattform und anderer ICT-Tools auf interaktive und innovative Weise.
- Ein nationaler Status und die Anerkennung von Lehrern und Schulen: eTwinning-Aktivitäten sind relativ schlecht in die nationalen Akkreditierungs- und Honorierungssysteme integriert, und die meisten Lehrer erhalten keine Anreize für eine Teilnahme am eTwinning. Die meisten NSSs sind sich dieser Teilnahmehemmnis durchaus bewusst, und einige Mitarbeiter der NSS haben als zusätzlichen Faktor auch das Fehlen klar umrissener pädagogischer Ziele, Zielsetzungen und Projektergebnisse genannt, die innerhalb der nationalen Systeme von Wert und Bedeutung wären.

Empfehlungen

Wenngleich die positiven Aspekte einer Beteiligung an eTwinning durch mehr Schulen und Lehrer durchaus befürwortet werden, so sind die Empfehlungen dieser Wirkungsstudie vor allem auf eine Verbesserung der Erfahrung mit eTwinning für die teilnehmenden Schüler, Lehrer und Schulen ausgerichtet, statt auf Strategien zur Erweiterung der derzeitigen Reichweite und des Umfangs der Initiative. Die Studie empfiehlt:

Schwerpunkt auf Qualität der eTwinning-Erfahrung

Eine Priorität in der nächsten Phase sollte es sein den Schwerpunkt auf die Qualität der eTwinning-Erfahrung für Lehrer zu legen. Eine weitere Zunahme der Zahl der

angemeldeten Lehrer sollte dabei jedoch nicht behindert werden. Die wesentliche Zielsetzung dieser Neuausrichtung sollte darin bestehen, mehr angemeldete eTwinning-Nutzer zur Initiierung von und Teilnahme an Schulprojekten zu motivieren. Zudem sollten die pädagogische Relevanz und die Ergebnisse der beruflichen Weiterentwicklung mit Hilfe der sozialen Netzwerke und Foren auf der eTwinning-Plattform stärker hervorgehoben werden.

Anspruchsvollere Erwartungen setzen

Die niedrigen Teilnahmevoraussetzungen begünstigen ein Engagement von Lehrern aller Niveaus und mit unterschiedlichen Kompetenzen und sollte von der Initiative weiterhin gefördert werden. Diese geringen Voraussetzungen sollten jedoch nicht mit geringer Qualität verwechselt werden, denn auch kleine und einfache Projekte können und sollten positive Lernergebnisse erbringen. Es gilt, höhere pädagogische Erwartungen an eTwinning insgesamt und an die Projekte im Besonderen zu setzen. Dieses würde zum Teil bedeuten, dass die Qualität der Lerninhalte neuer Projekte durch das Festlegen bestimmter ausdrücklicher Ziele und Maßstäbe (z.B. Beispiele bewährter Projekteinhalte und -ergebnisse) zu verbessern ist. Ein kritischer Schritt dabei ist die Wiedereinführung und Verstärkung der Pädagogischen Beratungsgruppe (PAG) der Zentralen Koordinierungsstelle, um damit eine stärkere pädagogische Beratung und Führung zu bieten und den Nationalen Koordinierungsstellen bei der Ausrichtung einer derartigen Beratung und Führung nach den lokalen Gegebenheiten und politischen Prioritäten zu helfen. Dazu wird auch eine verbesserte Bindung erfahrener eTwinning-Nutzer beitragen.

Einen Lernergebnisrahmen für die Projekte einführen

Um pädagogische Ansprüche bei eTwinning zu verbessern und unzureichendem Status und fehlender Anerkennung in den meisten nationalen Systemen zu begegnen, sollten eine oder mehrere Rahmenstrukturen für Lernergebnisse bzw. Kompetenzen entwickelt werden. Mit diesen würden Maßstäbe oder Kriterien gesetzt, anhand derer Projektvorschläge auf nationaler Ebene genehmigt werden können; ferner könnte den NSSs und Schulen geholfen werden, die Fortschritte bei einzelnen eTwinning-Projekten und allen Projekten im jeweiligen Land insgesamt zu bewerten und zu überwachen. Darüber hinaus würde dies die Messung der Auswirkungen von eTwinning in einzelnen Ländern ermöglichen, um so für eine bessere Anerkennung der eTwinning-Projekte durch die nationalen Behörden zu plädieren, sodass diese für Lehrer und Schulen als Erfolge wahrgenommen werden.

Verbesserung der Auswirkungen auf die gesamte Schule

Die Bemühungen sollten darauf ausgerichtet sein, eTwinning für eine nachhaltige und der gesamten Schule zuträglichkeit Auswirkung effektiver einzubinden. Dazu könnten folgende Maßnahmen beitragen: Anerkennung und feierliche Würdigung gemeinsamer Initiativen mit den Comenius-Schulpartnerschaften; Werbung, direkt bei Schulleitern und Rektoren, für die Vorteile aufeinanderfolgender eTwinning-Projekte mit "kumulativen Auswirkungen" und diesbezügliche Beratung der Schulen; Förderung eines stärkeren Schwerpunkts auf den Lernergebnissen; eine bessere Bindung und ein aktiveres Engagement der eTwinning-Teilnehmer innerhalb der Schulen.

Eine neue Ausrichtung der eTwinning-Initiative sollte den Schüler in den Mittelpunkt der Planung und der pädagogischen Diskussionen stellen, ohne dabei Gefahr zu laufen, nationale Normen oder Vorgaben zu übertreten. Dies kann gelingen indem man den Lehrern mehr und bessere Orientierungshilfen bereitstellt, um die Schüler einzubeziehen, ihnen Verantwortung zu übertragen und sie in die Entwicklung und Verbesserung der eTwinning-Plattform und Tools einzubinden.

1. Introduction

1.1. Background

1.1.1. The eTwinning Action

The European Union action programme in the field of lifelong learning (Lifelong Learning Programme – LLP) is managed by the European Commission and enables people at all stages of their lives to take part in stimulating learning experiences, as well as helping to develop the education and training sector across Europe.

With a budget of nearly €7 billion for 2007 to 2013, the programme funds a range of actions including exchanges, study visits and networking activities. Projects are intended not only for individual students and learners, but also for teachers, trainers and all others involved in education and training. There are four sub-programmes which fund projects at different levels of education and training; Comenius is the schools sub-programme.

Since 2007 eTwinning has been part of the Comenius strand of the LLP, although it was originally launched in 2005 under the eLearning Programme (2004 – 2006). eTwinning focuses on taking advantage of information and communication technology (ICT) to enhance cooperation between all kinds of schools which provide general, vocational or technical education from pre-school to upper secondary level, including special schools.

Through eTwinning schools can meet and establish an internet-based twinning link with one or more partner schools elsewhere in Europe. The main outputs of eTwinning are the joint projects developed by the participating schools using the tools and the secure internet spaces made available for them through the European eTwinning portal.

eTwinning also provides other services to teachers, including the search for partners for Comenius school partnerships, the possibility of taking part in communities of practice ('eTwinning Groups' and 'Teachers' Rooms'), in professional development workshops and in online learning events at national and European level.

1.1.2. The impact study

This impact study of eTwinning, in common with others related to the Comenius Programme, is intended to contribute to the final evaluation of the LLP (2007-2013), particularly assessing impact in terms of pedagogy, teacher professional development and pupil learning, and analysing the factors that contribute to, or constrain, successful participation in eTwinning and thus the impact upon the overall effectiveness of the Comenius Programme.

The study was commissioned from Education for Change Ltd (EfC) on 17th December 2010 and work commenced with the kick-off meeting with the European Commission (EC) Directorate-General Education and Culture (DG EAC) Lifelong Learning in Brussels on 24th January 2011.

1.1.3. Challenges in impact assessment

As with any education intervention, identifying and making explicit results and impact that can be attributed to participation in eTwinning alone and not to other factors has been a challenge. eTwinning is deliberately a 'light-touch' programme – an easy, non-bureaucratic way for teachers to collaborate together using a range of online tools – and direct, verifiable evidence of impact is hard to come by, though there is much anecdotal evidence to consider and the Central Support Service (CSS) is beginning to amass interesting surrogate and indicative evidence of user behaviour through the web analytics data.

It has also been pointed out that eTwinning activities cannot and should not be viewed independently of context. It is clear that the particular circumstances within which an individual teacher works, the resources available to them, their own professional background and experience, the characteristics of the education system of the country, the social and cultural background and attitudes of teachers and pupils in project partner schools etc., all influence the effective use of the eTwinning tools and the content and outcomes of eTwinning projects.

Across the whole programme the range and diversity of these individual school contexts is too great for a programme-level impact study to capture. In the absence of pre-defined project monitoring and evaluation indicators, common across the whole programme, which would facilitate impact assessment and comparison across different schools and contexts, the study has focused on investigating individual school experiences of eTwinning, and gathering the views of individual registered eTwinning teachers, in order to draw some wider conclusions.

The case studies we have researched have taken local and external contextual factors into account as far as we have been able to identify them: for example, specific features of the country's education system that impact on the eTwinning project under scrutiny; the economic and social context within which the school works; the facilities and equipment available to the school, school size etc.

The survey of registered eTwinning teachers and other conversations with eTwinning Ambassadors and staff from NSSs, have gathered views and opinions about the individual experience of eTwinning from different perspectives.

In this context, we have taken a broad brush approach to impact assessment and tried to seek evidence relating to the broad questions such as:

- Who is benefiting from participation in eTwinning and how?
- What is the nature and extent of any change in local conditions because of participation in eTwinning?
- What difference has eTwinning made?
- What would have happened in the absence of eTwinning?

1.1.4. This report

This report is the final report of the two-year impact study. It provides a summary of the European education and training policy and research context for the eTwinning Action (Chapter 2) and a review of eTwinning programme documents and data produced or gathered by the CSS (Chapter 3).

Chapter 4 summarises the main findings of the impact study under the following sections:

- Building social capital and networking
- Impact on participating teachers
- Impact on participating pupils
- Impact on participating schools
- Enablers and constraints on successful participation.

Chapter 5 draws some conclusions and Chapter 6 makes recommendations for the future development of the eTwinning Action.

A glossary of eTwinning terms is provided at the end of the report.

1.2. Methodology

1.2.1. Literature review

A literature review was conducted to provide contextual and background information to the eTwinning Action and identify European policy and international trends relevant to eTwinning activities. Appendix 2 provides references.

1.2.2. Data and document review

All published outputs available from the eTwinning CSS were reviewed in detail and additional data about activities in eTwinning were requested and obtained from the CSS, in order to map the current state of play (in terms of e.g. registration, country representation, numbers of projects, uptake of different parts of the eTwinning portal, etc). The review covered:

- eTwinning publications and guidance materials published up to the end of 2011
- statistics of registrations and projects published and updated regularly on the eTwinning website
- a dataset on registered eTwinners and projects generated by the CSS specifically for this impact study in February 2011
- data analysis (of data as of 19/1/2011 and 31/12/2011) of eTwinning Platform use presented in CSS PowerPoint presentations - Promoting eTwinning and eTwinning Status, and some additional data generated on request by the CSS on eTwinning groups
- some web analytics data on use of the eTwinning Platform from March and July 2011

It also covered eTwinning monitoring, advocacy and promotional publications produced by the CSS between 2008 and 2011. Appendix 2 provides references.

1.2.3. Case studies

The qualitative research for the study at national and school level focused on a series of eTwinning project school case studies. The case study schools were selected on the basis of an initial, long list of eTwinning schools using criteria such as country, number of projects, pupil age category and project start date. The National Support Service (NSS) in each of 13 countries was then invited to select three potential case study schools from this long list and 32 schools were asked to participate in the study, spread across the 13 countries ranked according to the number of registered eTwinners (Table 1). Full case study reports have been researched and prepared in 24 of these schools.

The case studies were researched in two visits to the recruited schools (between May and September 2011, and between February and June 2012) if the schools had begun new projects in between visits; or one visit and an extended telephone interview with key staff if very little had changed in eTwinning since the first visit. School visits by researchers lasted one to three days.

1.2.4. The general survey

A survey questionnaire targeted at registered eTwinning teachers was drafted and piloted in English, French, German and Czech. The final questionnaire, invitation and reminder text were translated into 25 languages including Turkish and Croatian. Using the CSS newsletter as the main channel of communication with eTwinners, an invitation to participate and a link to the online survey was sent on 3rd October 2011.

The NSSs in all eTwinning countries were sent requests from EC and DGEAC asking them to promote and encourage participation in the survey in early 2012, through their national websites, desktop pages, emails and national newsletters.

In order to maximise responses, the survey was kept open until 10th April 2012. The final number of responses was 5,946. The data across all languages were merged into one file for SPSS analysis.

Table 1: Number of case study schools selected per country and criteria used

Country	eTwinning Registered schools	Registered eTwinners	Projects registered before 1.6.2010	Projects registered after 1.6.2010	Schools in active projects	Schools in closed projects	TOTAL activity ranking	No. of case study schools selected
Poland	9112	12636	5295	1105	1318	2432	1	3
Italy	6461	9422	4158	740	902	1601	2	3
UK	8774	11477	3129	641	865	1555	3	3
Romania	4452	7286	2697	737	1021	1258	4	3
Germany	4255	5894	2216	467	570	1013	5	3
Sweden	1706	2619	761	126	196	358	7	2
Lithuania	1254	1726	915	159	176	358	8	2
Netherlands	1208	2167	684	118	160	291	9	2
Finland	1268	1843	725	116	150	343	10	1
Belgium	1153	1657	741	116	146	308	11	1
Austria	772	1030	433	80	97	192	12	1
Ireland	715	834	357	72	88	174	13	1
Cyprus	406	627	353	68	93	146	14	1

Note on the presentation of the data

The survey data were not adjusted for any non-response bias: all responses were considered valid and analysis of valid responses was conducted by question.

Percentages presented in the charts and graphs in this report use the valid percent, which expresses the number responding as a percentage of those who responded to that question, thereby stripping out those that did not respond to a particular question. Where questions allow for multiple choice, percentage of cases is presented, demonstrating the proportion of all respondents who selected that option.

In the survey, questions 5 to 8 were asked only of those eTwinners currently in projects, and question 9 was asked only of those not in projects. Data have been split accordingly. Percentages in these questions are expressed as the proportion of sub-set population (i.e. those in projects or not in projects).

1.2.5. Other data and evidence

In addition to the qualitative and quantitative research methods employed in the study, the research team also engaged in the following activities to gather further evidence, information and opinions:

- Researchers attended two eTwinning Annual Conferences (Budapest 2011 and Berlin 2012) during which representatives of over 20 NSSs and a number of eTwinning Ambassadors were interviewed and consulted.

- Discussions and meetings were held with Commission, Agency and CSS staff in Brussels.
- An analysis of the content of eTwinning Groups and Teachers' Rooms was undertaken in mid-2012 (see Appendix 3).
- In-country discussions were held with staff of the NSSs in 13 countries and a short survey was conducted eliciting their views on project assessment.

2. The context for eTwinning

2.1. Introduction

The eTwinning Action was included in the Comenius sub-programme of the Lifelong Learning Programme (LLP) in 2007. Comenius “addresses issues strongly related to current discussions and developments in school policy: motivation for learning and ‘learning-to-learn’ skills, key competences, digital educational content and inclusive education”¹.

This section summarises the European policy on key competences that underpins the LLP and therefore Comenius.

It also highlights some recent research work in Europe on critical pedagogical issues to provide a framework and context for this impact study of the eTwinning Action: these issues are

- teaching and learning using information and communication technology (ICT)
- professional development
- teaching methodologies and pedagogy

2.2. Key competences for Lifelong Learning

In December 2006 the Council and the European Parliament adopted a European Framework for Key Competences for Lifelong Learning², which identifies and defines, at the European level, the key competences that citizens require for their personal fulfilment, social inclusion, active citizenship and employability in knowledge-based societies.

Competences are defined as “a combination of knowledge, skills and attitudes appropriate to the context”. The Reference Framework sets out eight key competences:

- 1) Communication in the mother tongue
- 2) Communication in foreign languages
- 3) Mathematical competence and basic competences in science and technology
- 4) Digital competence
- 5) Learning to learn
- 6) Social and civic competences
- 7) Sense of initiative and entrepreneurship
- 8) Cultural awareness and expression

The goals and the gains of the LLP, Comenius and, therefore, eTwinning are clearly underpinned by this theoretical Framework of competences and the learning themes implicit in their acquisition and use in different contexts.

“Many of the competences overlap and interlock: aspects essential to one domain will support competence in another. Competence in the fundamental basic skills of language, literacy,

¹ http://ec.europa.eu/education/lifelong-learning-programme/comenius_en.htm

² European Commission (2007) Key Competences for Lifelong Learning – European Reference Framework. Luxembourg: Office for Official Publications of the European Communities, 2007 p 7 - 8

numeracy and in information and communication technologies (ICT) is an essential foundation for learning, and learning to learn supports all learning activities. There are a number of themes that are applied throughout the Reference Framework: critical thinking, creativity, initiative, problem-solving, risk assessment, decision-taking, and constructive management of feelings play a role in all eight key competences.”³

2.3. Teaching, learning and innovation using ICT

ICT infrastructure, facilities, competences and support are all critical factors in the effective use of eTwinning tools.

The Eurydice report on learning and innovation through ICT at school in Europe⁴ provides an overview of the current state of play and notes that “an overwhelming majority of people in Europe today use a computer for a variety of purposes; for the younger generation especially, using a computer is a normal, everyday activity.” With regard to the availability of computers in educational contexts, the report finds “some infrastructure problems persist and these are hindering the integration of new technologies into teaching and learning”, though it acknowledges that the integration of ICT into school education is a complex process and therefore it is affected by many different factors. “In 2009, in almost all countries, at least 75% of the students were studying in schools with one computer for up to four students. During the last 10 years, the disparities between schools have been eroded and there are between two and four students per computer in schools in most European countriesThe shortage of ICT resources still affects the instruction of around one third of students”⁵. In several countries, computers are still not readily accessible to students in the classroom, but are located in computer labs where they can only be used under a teacher’s supervision and during specific hours.

“Almost all countries include EU key competences in their steering documents and often recommend using ICT to teach these competences. Learning and innovation skills, including creativity, problem solving and communication, are mentioned in all the steering documents analysed, and the use of ICT is commonly proposed as method for developing these skills....General learning objectives for ICT are included in curricula especially at secondary level.”⁶

Of particular relevance to eTwinning, the report notes that “specific knowledge of, for example, the ‘social media’ or ‘how to use mobile devices’ is still not generalised in most countries”⁷.

The report finds in a wide range of countries “teachers are encouraged through central-level recommendations, suggestions or support material to use a variety of ICT hardware and software in the classroom, and in almost all countries this applies to all core curriculum subjects”. However, “evidence from international surveys shows that across the EU the teachers of around half the student population do not encourage the use of

³ Ibid p3

⁴ Eurydice (2011) Key Data on Learning and Innovation through ICT at School in Europe. Brussels, Education, Audiovisual and Culture Executive Agency, 2011. ISBN 978-92-9201-184-0 <http://eacea.ec.europa.eu/education/eurydice/>. Main findings p. 9 - 15

⁵ Ibid p 10

⁶ Ibid p 11

⁷ Ibid p 11

ICT for activities during mathematics or science lessons or in language of instruction or foreign language lessons”⁸.

In relation to strengthening and fostering the digital environment in schools, the importance of teachers’ ICT skills and abilities to incorporate ICT into education, the findings suggest a positive trend in teachers’ use of computers in class, but their general motivation to use ICT remains an issue, and the report identifies the teachers’ need for “regular support to keep up-to-date through relevant professional development programmes and materials”.

Engagement in eTwinning projects highlights, for teachers, schools and educational authorities, the potential impact of ICT on teaching and learning methodologies. The effective use of ICT, particularly social computing in classroom situations, can be one of the most challenging aspects of eTwinning.

In the interim report of the European Commission’s Joint Research Centre (JRC) Institute of Prospective Technological Studies (IPTS) project ‘Learning 2.0’⁹, Christine Redecker identifies a number of these key challenges and makes a strong case for “changed learning paradigms” relating to “the way in which digital technologies have changed how people access and manage information”. People now need to learn how to sift, select, organise and manage information according to its relevance; learning in the digital era is

*“fundamentally collaborative in nature; social networks arise around common (learning) interests and aims and facilitate the learning process by providing social and cognitive guidance and support”; the learner plays a central role in the learning process, “not as a passive recipient of information, but as an active author, co-creator, evaluator and critical commentator, and as a consequence, learning processes become increasingly personalised, tailored to the individual’s needs and interests.”*¹⁰

The report identifies at least four different innovative perspectives or stances on the use of social computing for learning, which mutually support each other but point to “the different objectives underlying the appropriation of social computing applications by learners, teachers and institutions”. These perspectives are:

- learning and achieving: social computing tools used as methodological or didactic tools to directly support, facilitate, enhance and improve learning processes and outcomes
- networking: social computing as a communication tool, supporting knowledge exchange and contributing to the establishment of social networks or communities;
- embracing diversity: social computing as a means of integrating learning into a wider community of different age groups, backgrounds and cultures, expertise and practice
- opening up to society: social computing as a tool for making institutional learning accessible and transparent for all members of society

⁸ Ibid p 12

⁹ Redecker, Christine (2009). Review of Learning 2.0 Practices: Study on the Impact of Web 2.0 Innovations on Education and Training in Europe. Joint Research Centre Institute for Prospective Technological Studies (IPTS) EUR – Scientific and Technical Research series: EUR 23664 EN. Luxembourg: Office for Official Publications of the European Communities, 2009 ISSN 1018-5593

¹⁰ Ibid p 9

It also concludes that the success of social computing tools in facilitating and improving learning processes and outcomes depends on a variety of factors, including:

- the availability and accessibility of social computing tools by teachers and learners
- the functionalities of the tools employed, their suitability for the chosen task and the learners' familiarity with and acceptance of these tools
- the students' attitudes towards the respective social computing tools and the extent to which they are able to appropriate them for their personal needs
- the participants' background knowledge and skills, the group structure, and the form of interaction and communication among peers
- the way in which social computing tools are embedded within the course, subject or institutional environment, including the teacher's ability to encourage participation and embed the tools in the learning process¹¹

2.4. Professional development trends

Professional development is quite widely interpreted in eTwinning and across participating countries, with an emphasis in eTwinning on the value and impact of informal dialogue between teachers. eTwinning documents have quoted the evidence on this potential impact from TALIS - the Organisation for Economic Co-operation and Development (OECD) Teaching and Learning International Survey (TALIS)¹² - which focuses on lower secondary education teachers and the principals of their schools, and seeks to provide policy-relevant data and analysis on, among others:

- teachers' professional development
- teachers' beliefs and attitudes about teaching and their pedagogical practices

Survey data cover responses from over 70,000 teachers and principals in 23 countries, including 14 EU Member States, Iceland, Norway and Turkey. The report presents statistics and analysis derived from the responses of the survey implemented in 2007-08.

The TALIS adopts a broad definition of professional development among teachers: activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher. This definition encompasses activities ranging from more organised and structured to more informal and self-directed. The survey asked teachers to indicate whether or not they had participated in the following activities:

- courses/workshops (e.g. on subject matter or methods and/or other education-related topics)
- education conferences or seminars (at which teachers and/or researchers present their research results and discuss education problems)
- qualification programme (e.g. a degree programme)
- observation visits to other schools

¹¹ Ibid p 12

¹² OECD (2009). Creating effective teaching and learning environments: first results from TALIS (Teaching and Learning International Survey). Paris, Organisation for Economic Co-operation and Development, 2009. ISBN 978-92-64-05605-3

- participation in a network of teachers formed specifically for the professional development of teachers
- individual or collaborative research on a topic of professional interest
- mentoring and/or peer observation and coaching, as part of a formal school arrangement
- reading professional literature (e.g. journals, evidence-based papers, thesis papers)
- engaging in informal dialogue with peers on how to improve teaching¹³

The type of professional development most often mentioned was “Informal dialogue to improve teaching”, with 93% of teachers on average reporting this activity during the survey period. Indeed, in all countries but Hungary and Mexico, it was the development activity most frequently reported, with a participation rate of more than 90% in most countries¹⁴.

TALIS asked teachers to report the impact of their development activities on their development as a teacher and found that “It is striking how positively teachers view the impact of these development activities and how consistent this is across all types of development activities.” On average across participating countries, teachers reported that the most effective forms of development were “Individual and collaborative research”, “Informal dialogue to improve teaching” and “Qualification programmes”, all with close to 90% of teachers reporting a moderate or large impact on their development as a teacher. The development activities that were reported to be relatively less effective were attendance at “Education conferences and seminars” and taking part in “Observation visits to other schools”, though even for these activities around 75% of teachers reported a moderate or high impact¹⁵.

Noting that “most professional development activities are aimed at changing teachers’ knowledge and beliefs and instructional practices” the TALIS report indicates two interesting net effects of professional development activities on teaching practices, as self-reported by the teachers responding to the survey, namely

- *“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.*
- *Professional development activities that take place at regular intervals and involve teachers in a rather stable social and collaborative context (i.e. networks or mentoring) have a significantly stronger association with teaching practices than regular workshops and courses.”¹⁶*

These findings about effects give support to the overall view that teachers gain benefits from and value more informal types of professional development, such as informal dialogue with peers on how to improve teaching and membership of professional development networks.

¹³ Ibid p 50

¹⁴ Ibid p 57

¹⁵ Ibid p 74

¹⁶ Ibid p 117

2.5. Teaching methods and pedagogy

eTwinning aims to have an impact on increasing innovation and experimentation with new methods of teaching, technologies and ways of performing traditional tasks.

In a two-year research project on creativity and innovation in education in the EU Member States by the European Commission (EC) JRC IPTS notes that “recent policies call for the strengthening of Europe’s innovative capacity and the development of a creative and knowledge-intensive economy and society through reinforcing the role of education and training in the knowledge triangle and focusing school curricula on creativity, innovation and entrepreneurship”¹⁷. In this project researchers sought to assess how far this policy focus on creativity and innovation in education has translated into practice in European primary and secondary schools. The final report of the project found significant shortcomings in practice and proposed five major areas where effort and improvement is needed to enable more creative learning and innovative teaching: three of these areas are of particular relevance to eTwinning, namely, curricula, pedagogies and assessment, ICT and digital media.

The study shows that the many teachers and education experts feel that the curricula in their countries do not, as yet, sufficiently encourage creativity and innovation; “curricula are often overloaded with content, which reduces the possibilities of creative and innovative learning approaches in practice”¹⁸.

In terms of pedagogy, the study also observed that conventional ways of teaching related to teacher-centred methods, frontal teaching and ‘chalk-and-talk’ prevail in a majority of schools in the EU27. “Many interviews suggest that teachers often revert to ‘default’ teaching styles, because they lack the skills and especially the confidence to implement new learning methods and approaches, which could support creativity more”¹⁹.

Other factors commonly constrain creative practices in teaching, such as tight timetables, overloaded curricula, lack of support in the class, too many pupils per teacher and a school culture that does not support new methods.

The study highlights the potential of ICT in enabling innovative and creative school environments. It gathered clear evidence that the majority of teachers in the study agree that ICT has improved their teaching (85%) and that it could be used to enhance creativity (91%). “Although usage of ICT remains largely related to more traditional technologies, there is a gradual shift to new tools. The technologies that teachers agreed were important for learning may be divided into three main clusters: conventional technologies, interactive technologies and more social technologies. The first cluster is the most popular with teachers and the last cluster is the least popular. This suggests that the potential of social technologies for learning is still unclear for the teachers surveyed”²⁰.

¹⁷ Cachia et al. (2010). Creative Learning and Innovative Teaching: Final Report on the Study on Creativity and Innovation in Education in the EU Member States. Written by Romina Cachia, Anusca Ferrari, Kirsti Ala-Mutka and Yves Punie. Joint Research Centre, Institute for Prospective Technological Studies, Luxembourg, 2010 EUR 24675 EN ISBN 978-92-79-18974-6 p 9

¹⁸ *ibid*

¹⁹ *Ibid* p 32

²⁰ *Ibid* p 25

3. Review of eTwinning data, reporting and publications

3.1. Introduction

Monitoring the eTwinning Action is the responsibility of the Central Support Services (CSS) currently based in European Schoolnet. The CSS gathers statistical and web analytics data on use and activity in eTwinning, from which it generates reports, as part of the regular reporting cycle or on demand (e.g. for presentations and conferences), and incorporates the data into occasional published narrative reports, promotional and reflective pieces (e.g. Beyond school projects: a report on eTwinning 2008-2009).

This chapter presents an analysis of this data and documentation which was undertaken to support our understanding of:

- the extent and scale of eTwinning school networking and teacher participation
- the activities pursued by registered eTwinners and participating pupils
- the evidence of eTwinning effectiveness and outcomes gathered by and reported on by the CSS

3.2. Data on the extent and scale of eTwinning

There are three key areas of interest apparent from review of the public and requested statistical and web analytics data provided by the CSS during 2011:

- numbers of registered active eTwinners
- retention of eTwinners
- number of projects (active and closed)

Monitoring data provided to this study and gathered by the study can show only a snapshot of the eTwinning action since take-up, active projects and registration are all changing continuously.

3.2.1. Numbers of registered active eTwinners

The growth in registration of teachers on eTwinning has been steady, particularly over the last three years, and continues (see Table 2:): at the time of writing there were around 170,000 registered 'users' in over 90,000 schools: i.e. teachers who have registered as eTwinners and been assigned a log-in identity.

Using registered eTwinning figures only, the average ratio of registered 'users' per school has risen in the last two years from 1.4 users per school to 1.96 users per school.

The CSS is aware of an important issue of impact arising in case studies undertaken for this impact study: there are also many teachers who are not registered on the platform (non-eTwinners) and yet are active in eTwinning activities (for instance by participating in other colleagues' eTwinning projects). The challenge for the CSS is how to capture information about how many of these participating non-eTwinners there are, and why they do not feel it is necessary to register as an eTwinning themselves.

'Active' membership of eTwinning is rather harder than registration to define and pin down from the statistics. The CSS definition of 'active users' is based on the decision of eTwinners to de-activate themselves from the platform. The CSS knows "by experience that users can be perfectly active eTwinners even if they do not login to the platform (for instance, they go straight to their project's TwinSpace)".

Table 2: eTwinning statistics overview (from eTwinning website on 24/7/2012)

Country	Registered schools	Registered users	Teachers involved in projects registered before 1.6.2011	Teachers involved in projects registered after 1.6.2011
Austria	841	1328	293	118
Belgium	1380	2216	502	183
Bulgaria	1981	2965	527	273
Croatia	589	1105	141	209
Cyprus	282	828	253	83
Czech Republic	2446	4520	1087	343
Denmark	1165	2700	655	227
Estonia	659	1969	251	128
Finland	1279	2325	517	137
FYR Macedonia	102	241	40	1
France	9777	16745	2972	1085
Germany	4754	8003	1701	654
Greece	3777	5218	1301	476
Hungary	1114	1702	316	110
Iceland	240	593	133	54
Ireland	852	1017	274	75
Italy	6743	11976	2559	873
Latvia	650	1597	183	133
Lithuania	1001	2430	532	195
Luxembourg	95	181	42	18
Malta	260	1040	238	65
Netherlands	1205	2851	512	169
Norway	805	1650	311	92
Poland	8695	16778	3787	1584
Portugal	1729	3734	780	304
Romania	4763	10408	2614	929
Slovakia	1422	3421	830	557
Slovenia	434	1002	302	109
Spain	7222	13709	2649	1064
Sweden	1855	3535	675	210
Switzerland	85	122	5	22
Turkey	15595	27873	2210	1110
United Kingdom	9118	14377	2616	734
Total	92915	170159	31808	12324

Users who did not log in to the portal for the past 12 months are considered active, but the CSS removes them from the search results when other users look for partners, in order to "improve the user experience"²¹. In March 2012 there was an average of 55% of

²¹ See the eTwinning Privacy Statement paragraph 6 "Data related to the profile of the user....are kept for one year after the user's last login. After one year from the last login,

total registered users who had not logged in on the platform in the past 12 months. The CSS told the study that many teachers do log in again after one year of inactivity (although it is impossible to know how many and when). The CSS speculates that an eTwinner may become silent for one school year and then gets back on the platform the following school year.

3.2.2. Retention of eTwinners

In 2011 the CSS used eTwinning analytics to address the question of retention of early eTwinners in activities on the platform (Vuorikari & Scimeca, 2012): that is, the percentage of eTwinners who have registered on eTwinning since its beginning in 2005, and who still return to log in to the eTwinning platform in 2011.

From the data, the CSS noted that, in 2011, 89% of users who registered on eTwinning in 2011 returned to log in to eTwinning at least once during that year; 42% of those who signed up in 2010 returned to eTwinning at least once in 2011; and among early eTwinners (i.e. registered in '05 and '06), about 16% or 1 in 6 still remained engaged in 2011.

Rates of retention are indicators of the significant impact of eTwinning on some participating teachers.

3.2.3. Number of projects (active and closed)

At the time of writing (July 2012) the eTwinning website states that there were 5,310 active projects and 18,203 closed projects (see Table 2).

Data from the eTwinning website as at 19/12/2011²² showed that 11,232 schools were involved in active projects and 21,904 schools had been involved in closed projects since eTwinning was launched.

".....Since 2005, over 54,000 projects have been registered involving more than 30,000 schools. If a simple 25:1 ratio of pupils per school per project -assuming, in the simplest scenario, that there are only two schools involved - is applied to this figure, it is estimated that the number of pupils touched by eTwinning projects is in the region of 750,000."²³

Project registrations annually remain more or less static: in 2010 a total of 4,707 projects were registered and in 2011 the figure slightly decreased to 4,685²⁴.

the user profile will automatically be set to inactive, i.e. no longer visible to other users or the outside world."

²² See Interim Report of the Impact Study p 7 Table 3: this data table is no longer publicly available at the eTwinning website, and current data does not show number of schools involved in projects.

²³ Pupils in eTwinning: case studies on pupil participation. Edited by Patricia Wastiau, Christina Crawley, Anne Gilleran. Brussels, European Schoolnet, November 2011. ISBN 978-949047780-6 p 5

²⁴ eTwinning status: data as at 31/12/2011. PowerPoint presentation by Santi Scimeca

3.3. Data on activities pursued by eTwinners and participating schools

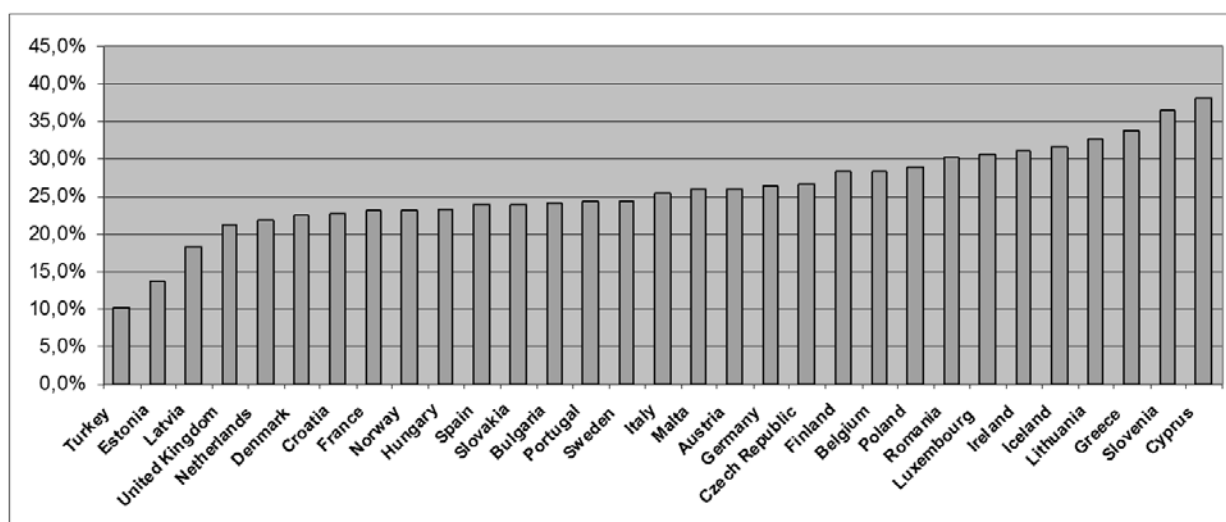
Research for this impact study has shown an association between engagement by eTwinners in eTwinning projects and higher levels of activity on the eTwinning platform overall. Projects are also the principal channel for eTwinning to have an impact upon participating pupils. There are three key areas of interest related to data on activities:

- actual project activity
- levels of other activity on the eTwinning platform
- use of eTwinning social networking tools

3.3.1. Project activity

Projects registered show significant activity among the teachers and pupils through the Twinspaces²⁵ they create: according to the monitoring data created by the CSS on 19/1/2011, in the four months previous to that date 7,214 Twinspaces were created with 179,891 individual members including at least 128,724 pupils.

Figure 1: Percentage of registered eTwinners involved in one or more projects (from CSS presentation of monitoring data as at 19/1/11)



The data show (see Figure 1) that in 2010 and 2011, 26%, on average, of individual registered eTwinners in any one country are actually involved in one or more projects, a slight increase over 25% in 2009. This appears to be a relatively low percentage of total registered eTwinners and the CSS has made efforts to engage eTwinners in other ways as well as through participation in projects.

3.3.2. Levels of other activity on the eTwinning Platform

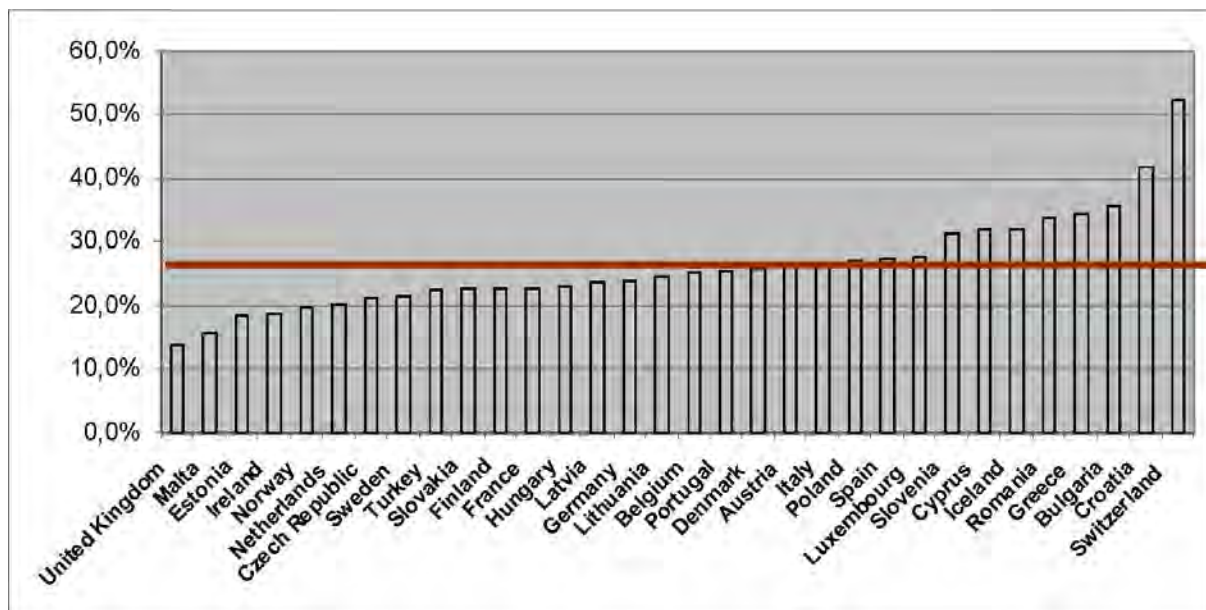
Project-partner-finding forums are the most used places on the platform, with a total of 66,771 messages left between 1/10/2010 and 19/1/2011. Over 7,500 (7,573) eTwinners

²⁵ Twinspace: A safe collaborative platform for schools (teachers and pupils) to use in a project. The TwinSpace offers privacy to each project and is available once the project is approved by the NSS. TwinSpaces can be published on the internet by their administrators.

posted at least one message during that period. Almost twenty thousand (19,372) eTwinners also 'signed up for a kit', meaning they signalled to prospective partners that they intended to use a particular eTwinning kit in their proposed project.

Those eTwinners not engaged in projects (the majority) may use the eTwinning platform in other ways and take up professional development opportunities on offer. According to CSS data (see Figure 2), on average 26% of users in each country logged into the eTwinning Desktop (a prerequisite to do any activity other than reading news and Group descriptions etc. on the website) during a three month period in 2011.

Figure 2: Unique users logging in to the Desktop Sept/Nov 2011 (from CSS presentation at 31/12/11)

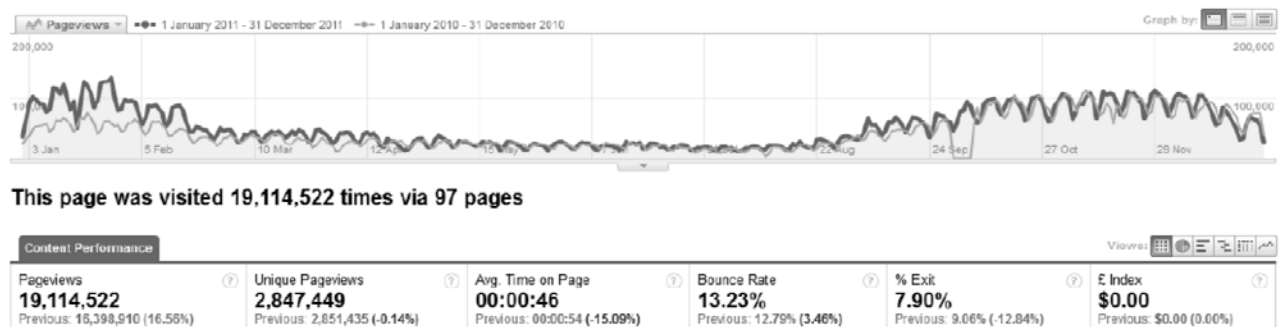


From web analytics data comparing use of the Desktop²⁶ in 1/1/2010-31/12/2010 to the same period in 2011 comes evidence of significant levels of interest in eTwinning: for example, continuing increases in the number of page views and unique views on the eTwinning Platform and a steadily diminishing bounce rate²⁷ (see Figure 3), which is very positive.

²⁶ **Desktop:** The eTwinning Desktop is the social networking area restricted to eTwinning registered teachers (pupils do not have access). Functionalities include: profile creation, networking and partner-finding tools, and resource sharing. Use your Desktop to share information about yourself and connect with others.

²⁷ **Pageviews:** A request for a file whose type is defined as a page: in log analysis, a single page view may generate multiple hits as all the resources required to view the page (images, .js and .css files) are also requested from the web server. **Unique pageviews:** equivalent of "Visits" to a single page. For example, if one person viewed a single page 100 times during the same visit, that page would show 100 page views, but only one "unique view". **Bounce rate:** The percentage of visits where the visitor enters and exits at the same page without visiting any other pages on the site on that occasion.

Figure 3: Web analytics: Desktop 2010/2011 (from CSS presentation 31/12/2011)

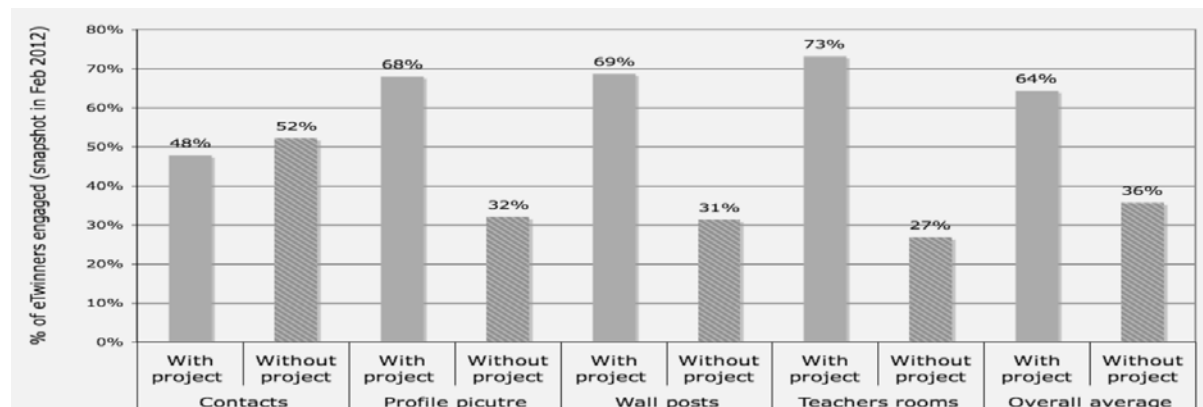


3.3.3. Use of eTwinning social networking tools

CSS figures from 19/1/2011 showed eTwinning Group²⁸ membership at 2,534 members, and membership of Teachers' Rooms²⁹ at 4,589 members, with 2,424 posts by 601 different users. Both the eTwinning Groups and the Teachers' Rooms were only introduced in 2010, and a further snapshot review of Teachers' Rooms as part of this impact study on 13/12/2011 showed that total membership of the 161 Rooms had increased to 9,738³⁰ (with three Rooms having over 400 members). However, activity levels were still quite low, with 5,531 messages posted in total.

In 2012, the CSS used eTwinning analytics to analyse usage of four different social networking tools (contact, profile picture, journal wall posts and Teachers' Rooms) divided into those involved in projects and those not involved in projects. The data show that those using the tools were more likely to be involved in projects (see Figure 4).

Figure 4: eTwinners use of social networking tools, divided by eTwinners with projects and without. Snapshot from February 2012 (from Vuorikari & Scimeca, 2012)



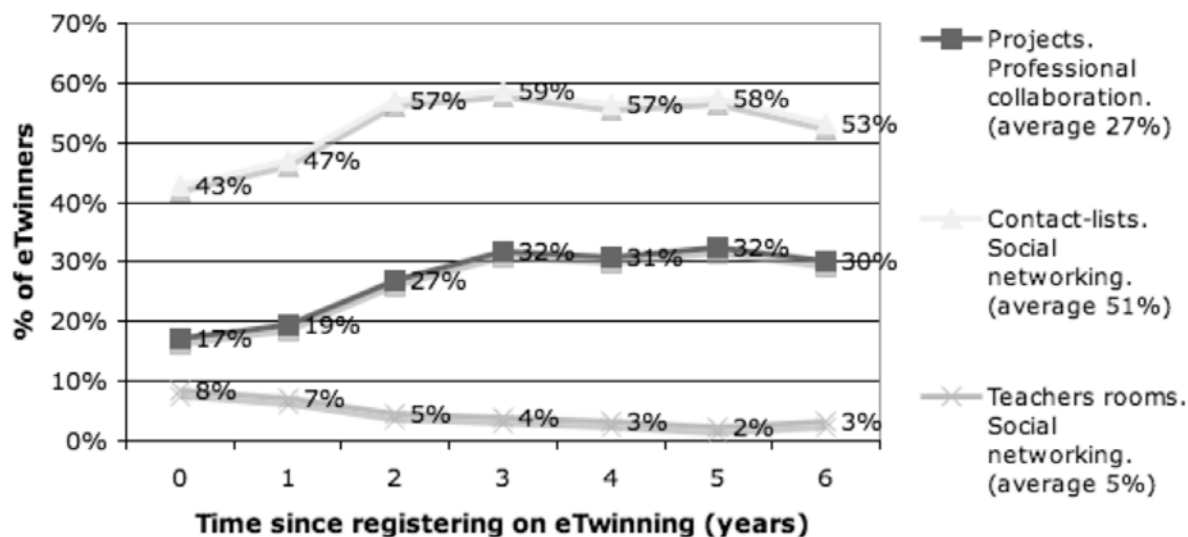
²⁸ **Groups:** Communities within eTwinning for teachers to discuss by subject, theme or topic. Groups are a great way to share ideas and connect with like-minded eTwinners. A full list of Groups is available on the eTwinning Desktop homepage.

²⁹ **Teachers' rooms:** Informal Rooms available on the eTwinning Desktop. Teachers can either join or create a Room and discuss an area of interest with others for up to three months.

³⁰ These could include teachers who are members of more than one Room – in July 2011, for instance, 435 teachers were members of more than one Room.

eTwinning analytics were also used to investigate whether any trends emerge over time in teachers' cooperation activities. Figure 5 shows the percentage of eTwinners engaging in projects and social networking activities by registration year.

Figure 5: eTwinners engagement on the portal disaggregated by the year of registration. February 2012 (from Vuokari & Scimeca, 2012)



"0 year" refers to eTwinners who registered in 2011; "1 year" to those registered in 2010, etc.

The CSS concluded that two patterns emerged:

- eTwinners in their early years seem to be less engaged in project collaboration than those who have been on the platform for 3 years or more; and
- eTwinners in their early years seem slightly more involved in Teachers' Rooms than others.

3.4. eTwinning publications and reports

The publications produced by the CSS contain valuable information, case studies and anecdotal evidence from eTwinners and projects. They have been used by this impact study to point to areas of possible impact and as a basis for the development of research instruments, discussion topics and interview questions.

However, these monitoring publications, reports and promotional publications have been treated with caution as a source of evidence of impact for a number of reasons.

- The teachers and schools whose survey responses and descriptive case studies of good practice form the basis for the publications are all self-reporting (for instance, the first user survey in 2008 had 1,308 respondents out of 60,000 registered eTwinners).
- Despite the small size of the evidence base the data have been used as evidence to support conclusions and directional changes in eTwinning developments, rather as if they were representative of particular trends or results within the whole participating eTwinning community³¹.
- In publications showcasing the experience of eTwinning teachers (e.g. Voices of eTwinning), either invitations to contribute their stories were posted on the website, or individual eTwinners (often eTwinning Ambassadors) were approached directly by the CSS or through the National Support Services (NSS), making it highly likely that the most articulate, most active and/or most enthusiastic eTwinners would be represented. There are few negative voices to balance the overall picture. When the primary purpose of the publications is advocacy, encouragement and inspiration for new eTwinners or promotion of eTwinning, this works well. However, they are less effective as evidence in support of the impact of eTwinning on participating teachers, pupils and schools.

For the purposes of this study there are five areas of particular relevance covered in the CSS publications:

- pedagogical issues and approaches
- pupil participation
- professional development
- promoting eTwinning activities outside of school projects
- perspectives on the outcomes and impact of eTwinning projects

3.4.1. Pedagogical issues and approaches

A series of three 'Reflections on eTwinning' produced by the Pedagogical Advisory Group (PAG) of the CSS in 2006-2007 defined the pedagogical landscape for the eTwinning action and pointed to areas in which eTwinning could make a significant contribution to pedagogical change – in particular towards a more learner-centred approach to education. This report structures the main findings of the impact study related to pedagogical change around these definitions, as they are useful indicators of the expected outcomes of the eTwinning Action.

³¹ For example, in the 2009 publication Building the Community of Schools for Europe: "In a survey launched at the end of 2008, eTwinning teachers were asked what they thought were the most important reasons for registering to eTwinning. Almost 70% of respondents from all over Europe stated that it was to help their students find other European peers. Also, more than 40%, and this is the second reason, declared that they wanted to meet other European colleagues" (European Schoolnet, 2010a, p 11).

European competences

Based on the main European key competences for lifelong learning (see 2.2 above) the authors defined the main competences, skills and knowledge that pupils and schools may develop through engaging in eTwinning (Table 3).³²

Table 3: European competences that may be developed in the scope of the eTwinning Action (taken from European Schoolnet, 2007)

Competencies	Knowledge	Skills	Attitude
Basic knowledge of Europe and the European Union	<ul style="list-style-type: none"> Gain basic knowledge about Europe and the European Union; countries, institutions, targets, projects etc. 	<ul style="list-style-type: none"> Reflect on similarities and difference Discover common roots 	<ul style="list-style-type: none"> Develop an interest in European history and culture, political and social systems
Ability to study and work in heterogeneous European groups	<ul style="list-style-type: none"> Understand the codes of conduct and manners generally accepted in different societies and environments Understand basic communication rules Know the rules of project management Know the rules of self-management and team work, especially in virtual teams 	<ul style="list-style-type: none"> Plan projects responsibly Work together with other pupils and European partner schools (team work) Develop intrapersonal, interpersonal and intercultural communicative skills: expression and negotiation in different environments 	<ul style="list-style-type: none"> Be open to different opinions and changing perspectives Understand intercultural work as an enrichment and potential for creating synergies
Ability to represent one's own culture towards others in Europe	<ul style="list-style-type: none"> Understand the codes of conduct and manners generally accepted in one's own and different societies Understand how national cultural identity interacts 	<ul style="list-style-type: none"> Reflect one's own culture (surroundings at school and at home) especially within the European context Express this reflection in words, pictures, etc. 	<ul style="list-style-type: none"> Develop respect and openness towards the diversity of cultural expression
Be aware of the values and systems of democracy as a basis for responsible citizenship	<ul style="list-style-type: none"> Understand the concepts of democracy, citizenship, civil rights, especially in the context of the EU 	<ul style="list-style-type: none"> Try to solve problems affecting local or wider communities Reflect critically and creatively on political issues and participate actively 	<ul style="list-style-type: none"> Develop fairness, respect and a sense of equality as well as identification and acceptance of one's self and others
Communication in two other foreign languages	<ul style="list-style-type: none"> Have a working knowledge of the main vocabulary and functional grammar Have a basic knowledge of language sciences 	<ul style="list-style-type: none"> Understand spoken and written messages Initiate, sustain and conclude conversations Read and understand texts 	<ul style="list-style-type: none"> Develop a positive attitude towards communication Appreciate cultural differences and diversity
Digital competence and use of ICT	<ul style="list-style-type: none"> Know the challenges and possibilities of ICT in personal, social and work contexts Know how to use UICT for one's own expression and collaborative networking 	<ul style="list-style-type: none"> Search, collect, select and process information in a critical, systematic way Produce, present and understand complete information Use ICT for creative and innovative purposes 	<ul style="list-style-type: none"> Develop a critical and reflective attitude towards all information Use interactive media responsibly

³² Reflections on eTwinning: cultural understanding and integration & professional development. Written by Conor Galvin et al for the Pedagogical Advisory Group. Brussels, European Schoolnet, February 2007.p 12-13

Collaborative learning

To make collaborative learning possible and effective the authors note the importance of developing a new consciousness within the school involving everybody – “only transparency and openness within teams allows for the potential to pursue a common goal and thus to be successful. Consequently, schools have to commit to and to promote collaborative working and learning inside and outside the school”³³.

They also note that “research has shown that pupils are more open to collaborative learning, the earlier they are involved in such practice.....collaborative learning seems to be more effective for motivation and the learning process, the earlier pupils are engaged in it”³⁴.

The authors also note that

*“....like all changes when starting collaborative working it will take more time in the early stages. Over the medium to long term, however, collaborative working leads to a reduction in effort since exchanging information, knowledge and materials leads to mutual support within the team and thus saves time.”*³⁵

Authentic learning

The important concept of ‘authentic learning’ – that is, when students believe the problems they are solving or the questions they are asking are their own - is developed by the PAG in the context of eTwinning. They cite evidence to suggest that students are more highly motivated when learning is authentic, and that when students work with other students the interactions are markedly different than when they work with a teacher, since

*“these situations create real audiences for their work and a real possibility of intellectual co-operation with peers in pursuit of joint projects. When students prepare work in the normal classroom there is an expectation that there will be mistakes and the teacher will correct it. Although a student may try hard to reduce the errors, the audience is the teacher and the culture provides a set of expectations that includes permission to make errors. When students prepare material for a different audience, in this case students in another country, the task takes on a new meaning and more care is taken in the execution of the task to reach the desired goal. The task is more authentic in that there is a real audience who will have to act on the information the students send, so there is willingness to invest extra effort to convey meaning in as correct a way as possible.”*³⁶

Use of ICT

From a pedagogical perspective ICT “is now seen as a means of encouraging a more personal style of learning in which the student is actively involved in seeking out knowledge and the answers to specific (and their own) problems. At the same time, he or she is adding to their skill base by learning how to manipulate the tools of technology itself”³⁷.

³³ Reflections on eTwinning: collaboration and eTwinning & enrichment and added value of eTwinning projects. Written by Conor Galvin et al for the Pedagogical Advisory Group. Brussels, European Schoolnet, September 2006 p 1-2

³⁴ Ibid p 5

³⁵ Ibid p 1-2

³⁶ Ibid p 7

³⁷ Ibid p 9

In considering what might be the innovative use of ICT in the European context, the authors in 2006 pointed out that

“so much of innovation is contextual..... So a school doing a simple email project within one country where there is limited resources in terms of bandwidth, internet access and computer availability may be just as innovative as a school that is very well equipped in a high speed connection zone doing projects involving video streaming and live conferencing.”³⁸

As the Eurydice report confirms (see 2.3), the disparities between schools, countries and regions in ICT availability and broadband access persist, though they are diminishing over time, so this comment from 2006 on innovation remains pertinent for eTwinning.

Pedagogical relationship between teacher and learner

Changing the relationship between teacher and learner is fundamental to the move towards more learner-centred education – “in new learning environments the role of the teacher will change from that of an expert into more of a coaching role”³⁹.

The authors propose a model of the move towards self-directed and exploratory learning and how the teacher-learner relationship can change (Table 4), and offer several examples of how an eTwinning project might fit within this model depending upon the style and objectives of the project and other external factors.

Table 4: Model of teacher-learner relationships in move towards self-directed learning (taken from European Schoolbook, 2007)

Content			
a Strongly theory directed, curriculum based	b More theory directed, curriculum based	c More practice oriented, problem based	d Strongly practice oriented, problem based
Responsibility			
a Teacher centred	b Teacher sometimes hands over responsibility to learners	c Teacher mostly hands over responsibility to learners	d Learners have full responsibility
Pedagogical relationship			
a Teacher is expert, pupil learns	b Some of the teacher activities are coaching	c Teacher has a coaching, facilitating and supportive role	d Teacher is actively participating in the learning process alongside students

Active participation

Fun and enjoyment are both valuable pedagogical tools and the authors distinguish between fun – “even serious or ‘dry’ skills or topics can be made to be fun and can be presented in an engaging way” – and enjoyment which involves active participation. They note that

“key to this state of flow and a moment of full enjoyment is motivation. Students’ learning problems are not always attributable to cognitive reasons but can arise from the fact that they do not feel motivated to learn.”⁴⁰

³⁸ Ibid p 15

³⁹ Reflections on eTwinning: pedagogical issues in eTwinning. Written by Conor Galvin et al for the Pedagogical Advisory Group. Brussels, European Schoolnet, October 2006. P 3

In the years after the PAG produced these reflective guides on pedagogical issues, this point appears to have been supported by evidence on pupil participation gathered by the CSS from eTwinning, which has

“indicated that active pupil participation is perceived by teachers as having a positive impact on pupil learning behaviour in different ways, such as: increased motivation, a greater sense of responsibility, more solidarity, better team spirit, more efficient learning (especially for complex learning), etc.”⁴¹

3.4.2. Pupil participation

In addition to the pedagogical changes defined by the PAG, case studies on pupils in eTwinning researched by the NSSs in 2010 and 2011 also highlight the concept of pupil participation, which is defined as the ways in which pupils’ interactions during an eTwinning project actively affects their relationship with their classmates, project partners and teachers.

The analysis of the NSS case studies found that

“in several of the case study projects, pupils were asked to make choices about certain aspects of work within the project (e.g. what part of a city to take picture of, what issue to be discussed online with partner pupils, what kind of calendar to be used for the tasks to be carried out, etc).... However, their contribution to the design of the project itself before launching, and the important choices to be made during the project, is nevertheless still rare; these key decisions remain mostly under the teachers’ responsibilities.”⁴²

The analysis notes “in pedagogical terms, eTwinning projects use an essentially project-based approach that often incorporates an inquiry-based methodology unlike regular teaching and learning processes” and that the impact of an eTwinning project in terms of pupil participation is related more to the characteristics of project work and not specifically to eTwinning’s ICT-based activities.

The use of ICT tools, however, is found to facilitate collaboration and project work in many ways (e.g. making it easier to showcase the achievements of pupils throughout a project to the larger community) that have a direct impact on pupils’ motivation and enthusiasm for the project activities.

In three other critical areas the NSS case studies were found to provide evidence of pedagogical change through the impact of eTwinning, echoing the elements and issues outlined by the PAG in their reflective series in 2006-2007 (see 3.4.1):

- Impact on pupil behaviour between peers in the same classroom:

“Pupils are... reported to feel much more responsible for the whole project in various ways; up to a point for some that they manage, without teacher intervention, to reorganise the division of responsibilities themselves within the group for the sake of the project..... when differences in age, preferences or competence levels are observed, pupils seem to be fully able to properly

⁴⁰ Ibid p 11-12

⁴¹ Pupils in eTwinning: case studies on pupil participation. Edited by Patricia Wastiau, Christina Crawley, Anne Gilleran. Brussels, European Schoolnet, November 2011. ISBN 978-949047780-6 p 6

⁴² Pupils in eTwinning: case studies on pupil participation. Edited by Patricia Wastiau, Christina Crawley, Anne Gilleran. Brussels, European Schoolnet, November 2011. ISBN 978-949047780-6 p 5

manage such situations, dividing tasks according to their competences and at the same time supporting and encouraging the less-experienced ones to go a step further to become more advanced.....Teachers find that pupils demonstrate a good sense of solidarity within the class or group, enjoy teamwork, share information and observe how others overcome problems and obstacles or simply proceed safely and efficiently.”⁴³

- Impact on pupil behaviour with partner peers:

“The subjects discussed between partner peers are....considered to be much more in line with pupils’ day-to-day areas of interest, compared to situations proposed by most school handbooks or regular teaching The teachers perceive this as another source of increased motivation for their pupils.....Comparing the habits, contexts, references, preferences, etc., of their partner peers to their own helps them not only to discover other environments and increases their knowledge and know-how; but also, as a consequence, supports a better understanding of their own environment..... ICT can facilitate the giving of direct access to native speakers of the same age with whom pupils can exchange through writing, listening and speaking.....even if the communication is in a language that is not the native language of either group (which is often the case) the opportunities for interaction provided by the eTwinning activities give an authentic dimension within which the pupils can exchange and converse.”⁴⁴

- Impact on the pupil-teacher relationship:

“Many teachers report a more relaxed and fruitful relationship between themselves and their pupils when pupils have the opportunity to actively participate in the work of the project.....Pupils are reported to be less reluctant to ask for the support of the teacher on how to proceed to solve content- or organisational-related issues. Cooperation takes place with teachers on one side, pupils on the other, and each bringing their own experience, skills and competences for the sake of the project.....[Many teachers] say that they will start their next eTwinning project by building on what was achieved with the previous project - with the aim to go one-step farther, especially when it comes to active pupil participation. The teachers plan to give pupils more responsibility in the decisions to be taken, to engage them in the initial design process, to give them a more organizational margin of manoeuvre, etc.”⁴⁵

3.4.3. Professional development activities

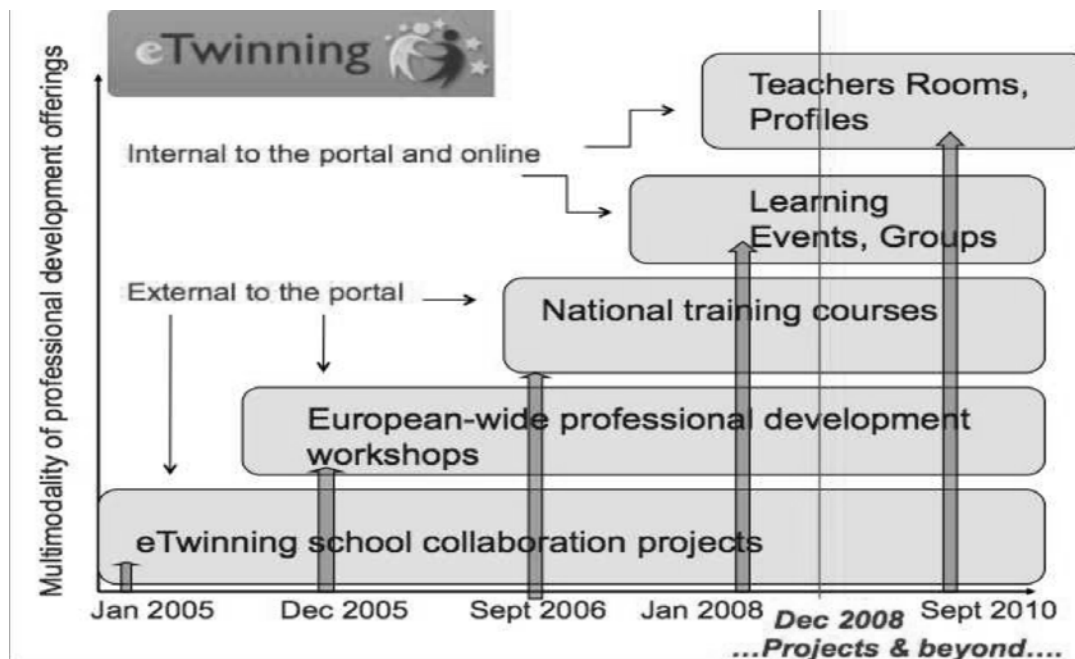
Professional development among practising teachers is interpreted quite broadly within eTwinning, to encompass personal development (confidence, communication, personal skills, etc), technical development (competence in using ICT, finding resources etc) and pedagogical development (lesson planning, using new teaching methods etc). eTwinning has offered professional development opportunities, focusing on technological and pedagogical skills to be applied within eTwinning, from its inception both face-to-face and online and added opportunities and tools to facilitate this (see Figure 6).

⁴³ Ibid p 7

⁴⁴ Ibid p 9

⁴⁵ Ibid p 10

Figure 6: The evolution of eTwinning from project to more diversified professional development (from European Schoolnet 2011b p 5)



By 2009 the monitoring of eTwinning through case studies of best practice revealed

“clear indications from the case note schools that the teachers believe being involved in eTwinning has been good for them in a personal/professional sense.....Teachers at the case schools were strongly of the view that involvement in eTwinning had not only helped them to use more technology in their lessons but had also helped them to become more confident in their usage and more innovative in the methodologies they practiced.” (European Schoolnet 2009b, p 15)

In ‘Building the community of schools for Europe’, Riina Vuorikari summarises the benefits of community-building activities outside of projects to the professional development of eTwinning teachers:

“Within the eTwinning community, teachers have a chance to become lifelong learners. They can shift their role from being a teacher in a classroom to a learner whose skills in the field continuously evolve. They can also take the role of a novice in the community in order to gain new ideas and inspirations for likely projects, thereby integrating new elements into their everyday teaching. Practical challenges related to daily work can be discussed together in order to reach collective solutions generated by this interaction of ideas. Requests for information can be easily dealt with in virtual communities since asynchronous communication allows people to answer questions at their own pace. Communities are also places where recycling ideas and resources take place.” (European Schoolnet 2010a, p 30)

The pilot activity called eTwinning Groups was launched in 2009 “in response to the growing demand for a more social approach in eTwinning, as highlighted by the responses of teachers to the 2008 user survey, and also by teachers in other eTwinning activities such as conferences and workshops.” (European Schoolnet 2009a p 43) Over two hundred participants were invited to join three Groups and to run their own activities for four months. A post-pilot survey of participants revealed that

"In general, the participating teachers found eTwinning Groups relevant from a professional point of view (77%). Participation in them had enabled the participants to meet new people (66%) and share experiences (55%). Additionally, 47% said they had the opportunity to learn new skills; 45% said they had reflected on existing practices in their job; and 29% shared interests using media such as photos. These experiences came through taking part in discussions by posting in forums, or replying to other users (67%); and through reflecting on experiences, problems, and conflictive situations (61%). In addition, 36% of the respondents said they had followed activities without contributing themselves (i.e. passive participation). A closer look shows that 20% were entirely passive participants, whereas 16% displayed both active and passive participation." (European Schoolnet 2009a, p 47-48)

The report concluded that, despite indications to the contrary from the pilot participants, the "groups failed to engage people in the activities". Also in the post-survey evaluation respondents

"clearly expressed...the feeling that groups need a more outcome-oriented focus (65%); as opposed to discussion and reflection". For future actions the CSS highlight leadership, engagement of participants and how to define the focus of the group, and recommends a second pilot with "a more bottom-up approach. A hypothesis could be that if only a little top-down coordination existed, and the participants were made clearly aware that their input is needed, then more inspiring and interesting activities could be planned and better engagement and satisfaction levels reached." (European Schoolnet 2009a, p 51)

By 2010, eTwinning Groups became a common feature of the platform. The evolution of eTwinning into a 'professional development network' is promoted in the 2010 eTwinning monitoring report on current practice in professional development (European Schoolnet 2010b), which cites the TALIS report's finding (OECD, 2009 – see 2.4 above) that "informal dialogue to improve teaching" is the most frequent activity for professional development, and that "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". Allied with the more formal type of professional development activities offered by eTwinning, the report concludes that the TALIS findings "can indicate that eTwinning, as a professional development network, has high potential to satisfy some of the teachers' professional development needs in Europe" (European Schoolnet 2010b, p 3).

This monitoring report on professional development is based on three countries that have shown success in their eTwinning activities, namely Estonia, Poland and Spain. Based on previous monitoring activities that "have already provided anecdotal evidence that professional development and eTwinning have demonstrated synergies in some countries", the monitoring exercise examined 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?

The evidence-gathering methodology began with a 'macro-level' analysis of eTwinning statistics of use in the three countries and, acknowledging the critical role of national professional development policies and practice to these questions, relied heavily upon interviews with the NSSs in each country.

The report concluded that, in Estonia, Poland and Spain, there is a strong link between eTwinning and professional development, particularly since, in all three countries, eTwinning has clear status as part of the formal professional development and career advancement programmes. It found that eTwinning:

- can develop an individual's skills, knowledge, expertise and other characteristics as a teacher;
- 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.

3.4.4. Promoting activities outside of projects

In the report on eTwinning 2008-2009 – Beyond school projects (European Schoolnet 2009a) – the CSS noted that the eTwinning environment, shaped by the decisions and interests of the teachers themselves, “is suitable, not only for contacting and communicating, but also for sharing practice and experience” and that eTwinning was becoming “the place to join’ for all teachers interested in going beyond their school’s horizon, meeting colleagues in Europe, and helping their pupils work together with foreign peers”.

The report announced the change of motto for eTwinning from “school partnerships in Europe” to “the community for schools in Europe” (European Schoolnet, 2009a, p 6) – a significant shift in emphasis. Based on its review of eTwinning statistics for the year after the launch of the redesigned platform in 2008, the report perceived that “the arrival of a more explicit ‘social networking’ approach has triggered contacts between teachers in ways not previously available”.

The redesigned platform promoted several social media or Web 2.0 tools for teachers to collaborate, discuss and share experience and resources outside of project Twinspaces. This shift in emphasis away from projects to a wider, less structured purpose was:

- driven by evidence from monitoring data in which “it was observed that teachers were actually using the tools not solely to find partners for a project, but also to simply be part of a community of teachers, with peer-to peer activities taking place before, after and in parallel to projects. Hundreds of thousands of messages exchanged on the platform in actual fact demonstrated that teachers were not only searching for partners for school projects, but used the Portal for something more” (European Schoolnet 2010a, p 12); and
- supported by results from the user survey in 2008 in which about 70% of the 1,308 respondents stated that their main reason for joining eTwinning was to help their students find other European peers, and about 40% declared that they wanted to meet other European colleagues

3.4.5. Perspectives on the outcomes and impact of eTwinning projects

The CSS summarised the overall impact of the eTwinning Action in 2009:

“By the end of the year 2009, there were already close to four thousand eTwinning projects run by seventy-eight thousand registered schools, spread across thirty-two countries.”

This introduction of active school collaboration across geographical, social and cultural borders should be considered a significant impact of the eTwinning Action in its own right, and one that has grown considerably with the numbers of projects and schools collaborating in the two subsequent years. Justifiably, the CSS claimed that “eTwinning has become a living and learning laboratory for the wider application of Information and Communication Technologies (ICT) in schools in Europe” (European Schoolnet 2009b).

At an individual school level the 2008 survey of eTwinning teachers found that “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” (European Schoolnet 2009a).

'eTwinning in the classroom' was a 14-month study of main eTwinning activities that took place in 31 schools drawn from 11 participating NSS teams. The study concluded

"there was very strong agreement and very high levels of correlation among the case schools with regard to the positive impact that eTwinning has on the pupil experience. The projects were seen as significant in terms of developing pupils' ICT skills but almost equally significant in the contribution they made to pupils' understanding of Europe and its people, and the way in which projects developed their cooperation and teamwork skills. The projects were additionally seen as motivational and contributing meaningfully to the development of foreign language skills and aiding better understanding of the content/curriculum areas being studied." (European Schoolnet 2009b, p 15)

The importance of tangible project outputs and achievement for motivating and empowering eTwinning participants was also noted.

"The display of artefacts from eTwinning projects is a common feature of practice at the case note schools (e.g., clay figures, wall displays, music tracks, DVDs, websites, etc). For many project participants – both teachers and pupils – this seems to have resulted in a strong sense of achievement reflecting a realisation that we can do this, and do it well." (European Schoolnet 2009b, p 26)

The teachers who contributed to 'Voices of eTwinning'

"are all convinced that eTwinning projects have created very rich and authentic learning situations for their pupils. They have greatly contributed to increasing their motivation and openness, improving their communication and team-work skills and helping them to develop cultural awareness and tolerance of differences." (European Schoolnet 2010c, p 9)

3.4.6. Summary

These publications provide an interesting insight into the expectations of eTwinning and the perception of what is happening in and outside the classroom. The tools developed for this impact study aimed to test the findings and assumptions outlined in publications, such as the definitions of pedagogical change and pupil participation; the role of professional development activities and sharing experiences; and the types of impacts and outcomes expected and identified. These have been explored in our discussions with pupils, teachers, school managers, eTwinning ambassadors and NSS staff, and the presentation of our findings in the next chapter aligns to these themes.

4. Main findings of the impact study

This chapter presents evidence of outcomes and impact gathered from the general survey and case study research undertaken during the course of the study, and draws on data and other documentary evidence identified during the document review (see Chapter 3 above). The evidence and findings are organised, according to the TOR paragraph 2.3, around the following themes:

- Building social capital and networking: the impact of eTwinning on helping teachers and schools across Europe to network and build social capital and the effectiveness of the management and promotion of the action in this regard
- Impact on participating teachers: attitudes towards European collaboration, cooperative learning and use of ICTs for teaching, e-confidence, pedagogical relationship with students, collaboration with colleagues inside the school, curricular integration of eTwinning projects, professional development, acquaintance with new teaching methods, motivation, peer learning
- Impact on participating pupils: level of involvement in projects, impact on attitudes (e.g. motivation, level of learning autonomy, curiosity and openness to other European cultures), possible changes in the pedagogical relationship with teachers, cultural awareness, social competences, language and team work skills
- Impact on participating schools: involvement of the school leadership in eTwinning, European/international outlook of the school, cross-curricular collaboration
- Enablers of and constraints on successful participation of teachers and pupils in eTwinning.

4.1. Building social capital and networking

4.1.1. Building social capital

Definitions

Broadly, social capital can be defined as 'the network of social connections that exist between people, and their shared values and norms of behaviour, which enable and encourage mutually advantageous social cooperation'.

In the context of teachers' professional development a more specific definition of practitioner-based social capital is "the resources, information and support for effective teaching that are available through a teacher's social network"⁴⁶.

Scope and reach of eTwinning

In both the broad and specific senses of the term, the eTwinning action has made a contribution and had an impact through the increasing scale and scope of its network of participating schools, teachers and pupils, as well as its contribution to professional development. The eTwinning network is unique in this scale and scope and has no precedent or comparator within or outside Europe.

The growth in registration of teachers on eTwinning has been steady, particularly over the last three years, and continues (see Table 2): at the time of writing there were around 170,000 registered 'users' in over 90,000 schools (see 3.2.1). The average ratio of registered 'user' per school has risen in the last two years from 1.4 users per school to 1.96 users per school.

Using the Central Support Service (CSS) estimates (see 3.2.3) this means that participation in eTwinning over the last six years must have involved close to one million pupils across 33 countries in Europe.

An unquantifiable but nonetheless real impact must be assumed from this order of magnitude, evident, in social capital terms, in changes such as:

- decreased isolation of pupils and teachers in some countries and remote regions
- greater awareness and understanding of the lives of others in different countries and peer connections through shared achievements
- determination on the part of teachers and pupils to build on and retain contacts and friendships made through collaboration

4.1.2. Networking

The effects of networking on teachers

About two-thirds (64%) of registered eTwinners surveyed identified 'new friends from across Europe' as one of the main advantages of participating in eTwinning; over half (55%) identified the sense of being part of the international teaching community as another of the main advantages.

Just over two-thirds (68%) of those surveyed expected to be able to exchange experience and information with colleagues in other countries by participating in

⁴⁶ Baker-Doyle, Kira & Yoon, Susan A (2011). In search of practitioner-based social capital: a social network analysis tool for understanding and facilitating teacher collaboration in a US-based STEM professional development program. *Professional Development in Education*, 37:1, 75-93.

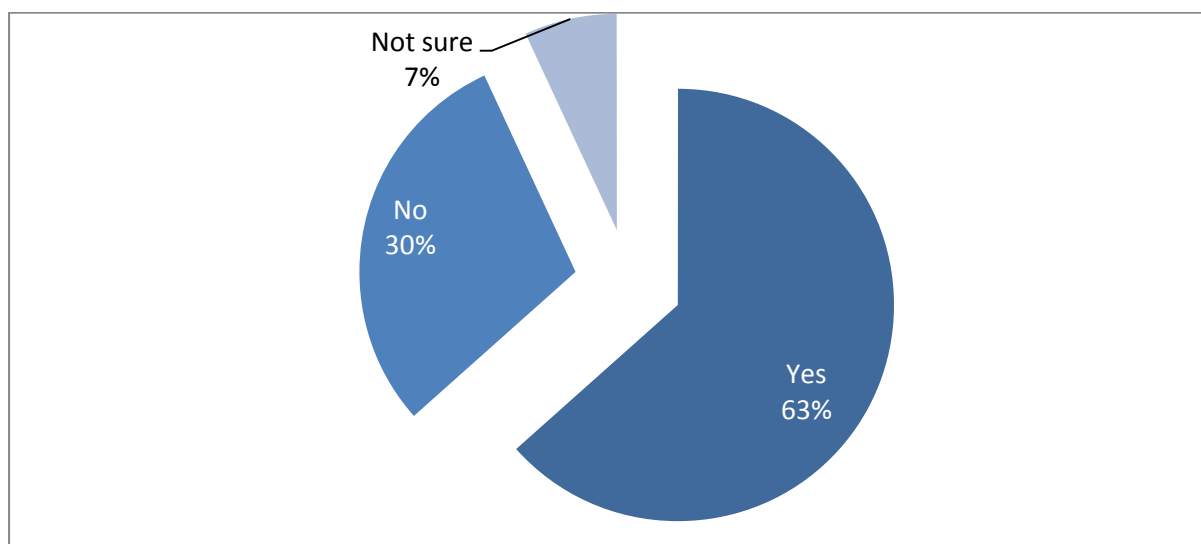
eTwinning and have had this expectation fulfilled; 58% expected that participation in eTwinning would help them to develop their teaching skills through reflection and dialogue with other teachers and were also not disappointed.

Evidence from the case studies broadly supports the positive effects on teachers of networking and dialogue with other colleagues, particularly within a project context. For example, in the **Belgium case study** secondary school the eTwinning teacher is the only registered eTwinner in the school. He has appreciated opportunities for dialogue with foreign colleagues; in particular, he has developed a strong relationship with an Italian colleague with whom he has collaborated on multiple projects.

In addition to the online tools, a relatively small proportion of total registered eTwinners (restricted only by the number of places available annually on workshops and courses etc.) are able to take advantage of participation in eTwinning professional development and networking events – either provided by the CSS (such as online learning events, Professional Development Workshops (PDWs) or annual eTwinning conferences) or in-country events organised by the National Support Services (NSSs) and/or eTwinning Ambassadors. Significantly more teachers take part in NSS organised events (bilateral and multilateral workshops and contact seminars, national eTwinning online courses – often including teachers from other countries, regional meetings, etc.) than in CSS events.

These events and opportunities almost always lead to lasting friendships and professional dialogue across borders, and often to involvement in eTwinning projects (Figure 7).

Figure 7: Percentage of survey respondents who became involved (now or in the past) in an eTwinning project as a result of participating in an eTwinning professional development event



Opportunities to collaborate, experiment with ICT and pedagogical innovation, make contacts with other professionals, find out more about professional, social and cultural life in other countries – one or more of these elements are discernible in all projects and exchanges irrespective of complexity, scale or subject content. The extent to which these opportunities have then been exploited to bring lasting change differs widely according to individual competences and external circumstances, but without participation in eTwinning those opportunities would have been immeasurably more difficult to create.

Networking schools across Europe

Engagement in eTwinning projects is where the main opportunities lie for beneficial impact on pupils themselves and schools, although better trained, more motivated and more innovative teaching staff are likely to bring direct and indirect benefits to their colleagues and the whole school (see section 4.2).

Despite the spread of the eTwinning Action across countries and current numbers of teachers registered (see Table 2) the number of actual projects (open and closed) appears to be relatively low in contrast to the number of registered eTwinners. However, it is important to note that the purpose of registration is not always to take part in an eTwinning project since the eTwinning platform is also the official partner-finding place for Comenius school partnerships. About 26% of registered teachers are currently engaged in projects (see 3.3.1).

At the time of writing (July 2012) the CSS reported 5,310 active projects and 18,203 closed projects. Overall, the data show (see 3.2.3) that in 2011 about 33,000 schools had become involved in at least one project since the launch of eTwinning. This is some way from the CSS's "expected target of 60,000 cooperating schools, representing 25,000 projects by the end of the 6-year period 2008- 2013"⁴⁷. While the total number of projects is almost at the target, the number of involved schools stands at just over half that target. The trend in project registrations per year over the period of this impact study appeared to be static or slightly decreased (3.2.3).

Using CSS statistical data (Table 2) it is possible to estimate the proportion of registered schools (i.e. schools with at least one registered eTwinner) that have been or are currently involved in a project (Figure 8).

Figure 8 indicates that the impact of eTwinning on schools, in terms of percentage of participating schools networking and collaborating in projects, appears to be highest in smaller countries, where schools may feel motivated to get involved by isolation and, perhaps, where the NSSs are also able to have a greater reach with their available resources to support and promote eTwinning. Incentives to overcome perceived isolation may also be a factor underpinning the relatively high percentages of project involvement by schools in Romania and Poland.

A range of national systemic and contextual factors, well known to NSSs, must constrain or facilitate comparatively high or low school involvement in projects. Language barriers must play some part in constraining project activity by schools in countries at the lower end of this scale (e.g. Hungary, FYR Macedonia, Bulgaria); and countries that have only recently joined eTwinning (e.g. Turkey and Switzerland) would be expected to take time to develop projects.

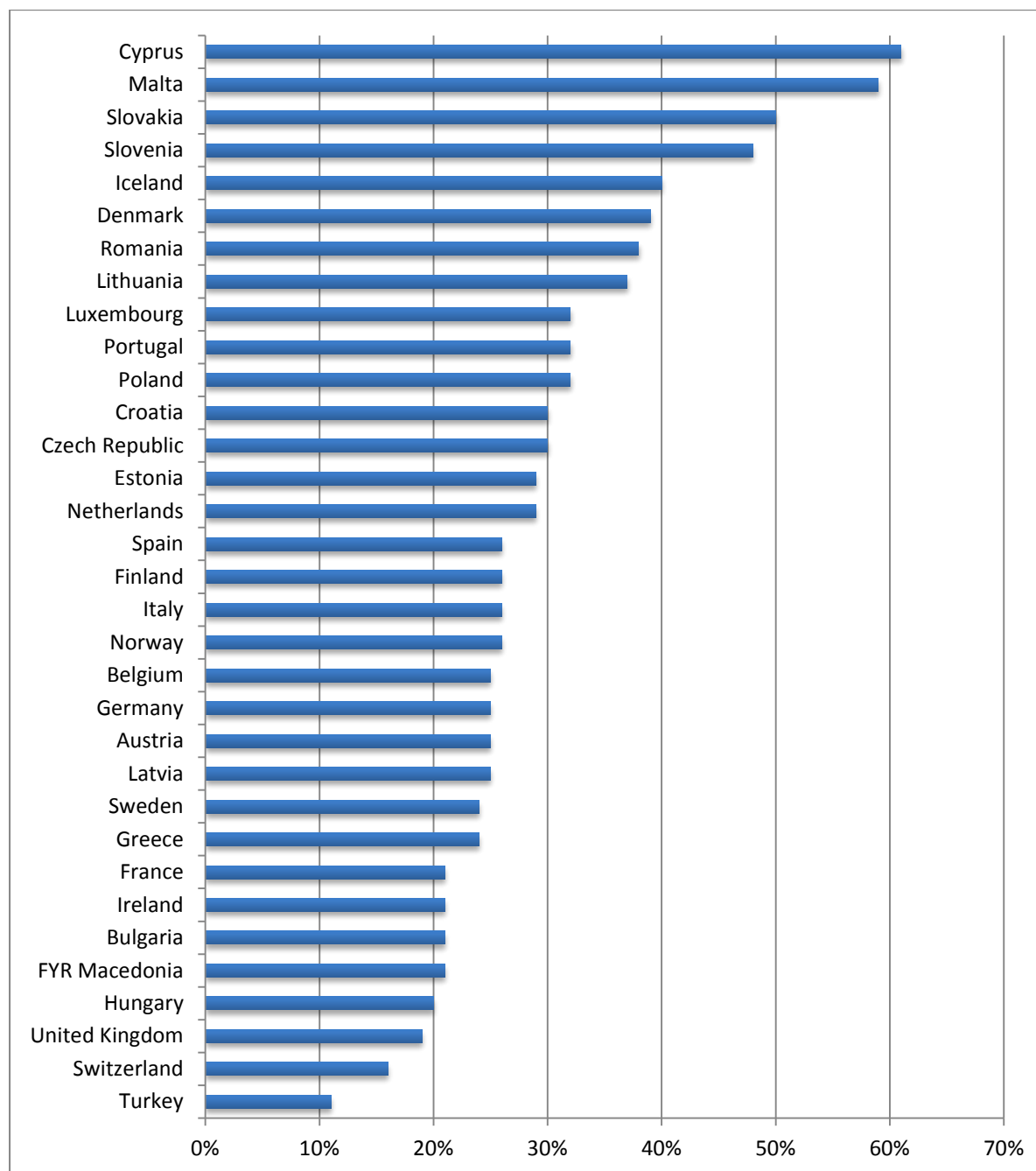
In-country networking

A quarter (26%) of survey respondents said they had participated in country-based eTwinning workshops organised by NSSs and 19% in in-country eTwinning online events. Both of these provide good opportunities for networking and forming lasting and mutually beneficial relationships between teachers in the same country – good ways to build social and practitioner-based capital.

Ambassadors are active in promoting participation in eTwinning and providing hands-on expertise and training for the less experienced eTwinners, and thus have an important role to play in spreading the impact of eTwinning within the country.

⁴⁷ eTwinning Final Report 2009 Executive Summary, p 3

Figure 8: Percentage⁴⁸ of registered schools per country that have been or are currently involved in an eTwinning project

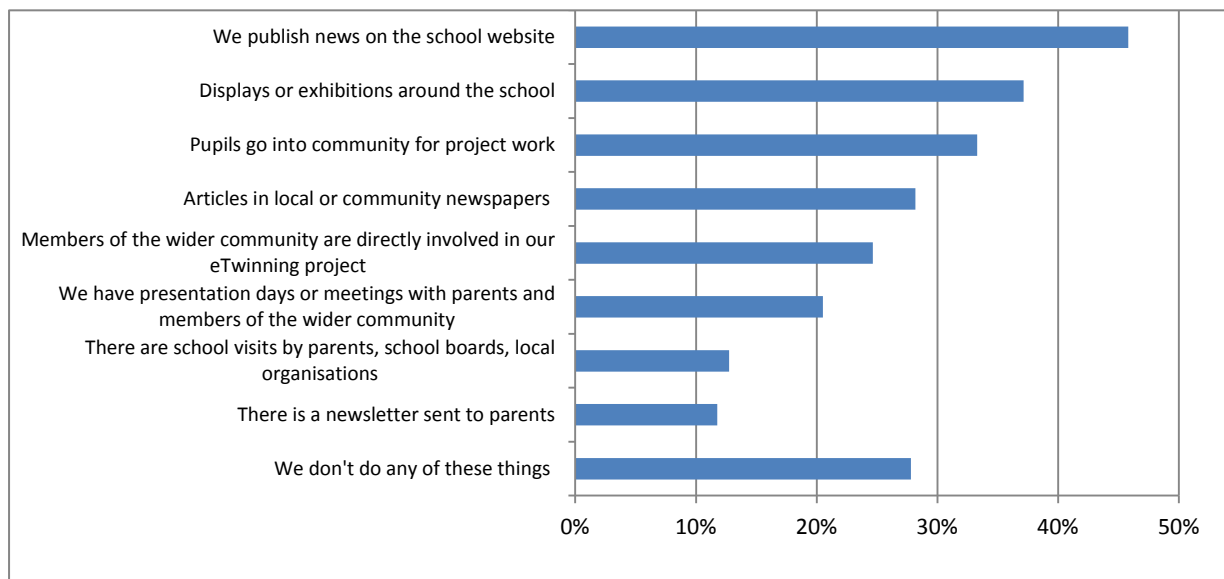


⁴⁸ Based on Table 3, number of eTwinning teachers involved in a project after 01/06/2011 + number of eTwinning teachers involved in a project before 01/06/2011 / 1.96 (the average number of eTwinners per school) expressed as a percentage of number of registered schools per country.

School and community networking

Almost half of the surveyed eTwinners engaged in projects said that information and news about their projects was disseminated outside the school through the school website (Figure 9). In 33% of cases, the pupils go into the community for their eTwinning project work in research and other activities, and in 25% members of the wider community, including parents, are directly involved in the eTwinning project.

Figure 9: Wider community involvement in eTwinning activities



For example, in a case study in **Germany** (Germany 2, a lower secondary school), the environmental theme of the eTwinning project was initiated by parents when they and pupils got very worried about pollution during major renovation works, as it became evident that the school had a severe toxic chemicals problem (PCB). To tackle the situation from a psychological perspective, the parents - with the coordinator - promoted an eTwinning project with partner schools that were also directly affected by major environmental problems.

In **Italy** (Italy 1, a primary and lower secondary school), the engagement of parents and civil society is vital in this small and remote village with a diversity of pupils. There is a close relationship with organisations such as the parents' association, association of people with disabilities, association of Roma people, and other groups. There are monthly messages to the parents telling them about recent activities in the eTwinning projects. Parents believe discrimination can be fought through education and by getting to know other cultures.

4.1.3. Management and promotion of the eTwinning platform and network

The CSS

European Schoolnet has evidently been very effective as the CSS in managing the development of the eTwinning platform and promoting its benefits, in collaboration with the NSSs, to encourage registration by teachers: the growth in enrolment by teachers since its inception is testimony to this effectiveness.

This has been a complex management role, being the principal developer of the online portals and tools and the service provider to eTwinning teachers and schools, while avoiding burdensome bureaucracy or too proscriptive direction that might stifle the

potentially wide diversity of pedagogical and thematic approaches adopted by the networked schools and teachers.

While the formula they have hit upon has been effective in attracting teachers, two key challenges associated with the impact of the eTwinning Action remain:

- retaining registered eTwinners in the programme over a number of years, so that they and their schools may reap the benefits of progressive experience
- ensuring that engagement with eTwinning by individual teachers results in collaborative projects that benefit pupils and build European school networks

The National Support Services

The CSS relies to a significant extent on the network of NSSs in promoting eTwinning in-country, supporting eTwinners with help desks and professional development training related to collaborative online learning, as well as obtaining feedback on successes, challenges and possible new directions. The relationship between the CSS and all the NSSs is reportedly constructive and positive.

The effectiveness and quality of the services provided by NSSs, and their engagement at many levels in sustaining and strengthening eTwinning in-country, appear to be essential to the success of the Action, and can impact greatly on the teachers and schools.

The NSS is designated by each country's authorities and not selected by either the Commission, the Agency or the CSS. While all NSSs subscribe to a common role and objectives⁴⁹, there is considerable variation in the resources available to each NSS and in their status within the country (part of government ministries, autonomous and independent bodies, etc). There is also variation in the level of contact with their NSS and in the perceptions among eTwinning teachers and schools of the activities and impact of the NSS and the eTwinning Ambassadors (appointed to this role by the NSS).

On average, most NSSs appear to have between two and three full-time staff (several have fewer than this, and one or two others considerably more). Most are able to visit individual schools only rarely if at all, and usually for a specific purpose such as presenting an award. Support and assistance if sought are provided through email and phone calls. Monitoring projects in most cases relies on the Quality Label application system. Most NSSs focus on running local conferences and events to promote eTwinning and to contact eTwinning teachers, delegating much of the school contact to the network of eTwinning Ambassadors.

As the number of registered eTwinners and number of projects has grown in most countries, the NSSs appear to have become increasingly concerned with the issue of evaluating and assessing eTwinning projects (both at proposal stage and in project implementation), though NSS staff are acutely aware of the need to avoid any formal or burdensome procedures. According to interviews conducted with NSS staff, and a short anonymous NSS survey covering 23 NSSs, most NSS staff (more than 70% of survey respondents) are concerned that there is already enough testing and evaluation in the life of teachers and schools, and that eTwinning should remain an 'unstructured', free space for teachers and pupils to do what they want to do.

The majority of staff are nonetheless concerned at the lack of assessment (in country and at Programme level) of project outcomes, particularly in terms of pedagogical change. They see these as important elements in building a case for the better

⁴⁹ Invitations to submit work programme: eTwinning National Support Services - 2011 (INVIT 2011 D304450) (EACEA 40/2010)

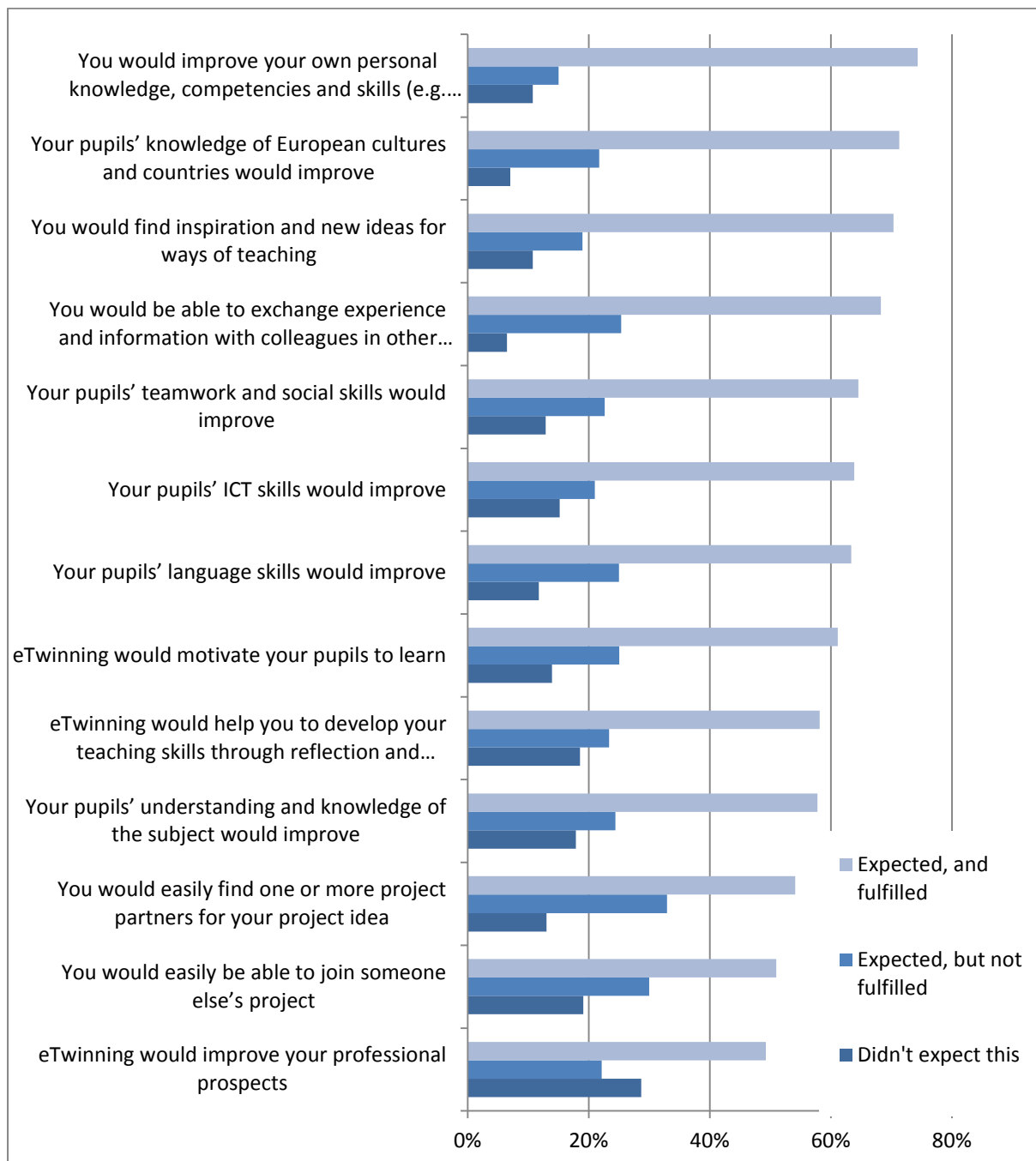
integration of eTwinning activities into the national system of teacher and school accreditation, involving status, recognition and professional career development.

4.2. Impact on participating teachers

4.2.1. Expectations of eTwinning

The teachers responding to the survey were asked to say what their original expectations of eTwinning were and whether or not these expectations had been fulfilled by their experience. The majority confirmed that they had had realistic, positive expectations of eTwinning and that these had largely been fulfilled.

Figure 10: Expectations of eTwinning: whether or not fulfilled by experience (% of respondents)



Personal and professional impacts

In particular, as Figure 10 shows, 74% of responding eTwinners had expected to and had been able to improve their personal knowledge, competences and skills; and 58% had expected to and subsequently been able to develop their teaching skills through reflection and dialogue with other teachers.

Half (49%) had expected that eTwinning would improve their professional prospects and found that this turned out to be so. This figure is very positive considering that only 12% of respondents had received any recognition for their efforts in eTwinning from their educational authorities and only 3% had been upgraded or promoted (see Figure 16); about one third (29%) of respondents engaged in eTwinning without any expectation of improvement in their professional prospects.

Expected impacts upon pupils

The survey data show that responding teachers had high expectations of positive change and improvement in their pupils' abilities, knowledge and attitudes and that these expectations are generally fulfilled by their experience of eTwinning (Figure 10).

Almost three out of four (71%) teachers surveyed expected that their pupils' knowledge of European cultures and countries would improve and their expectation was fulfilled. Similarly positive results are shown in five other areas, where expectations existed and were fulfilled:

- pupils' teamwork and social skills (65%)
- pupils' ICT skills (64%)
- pupils' language skills (63%)
- eTwinning motivated pupils to learn (61%)
- pupils' understanding and knowledge of the subject(s) improved (58%)

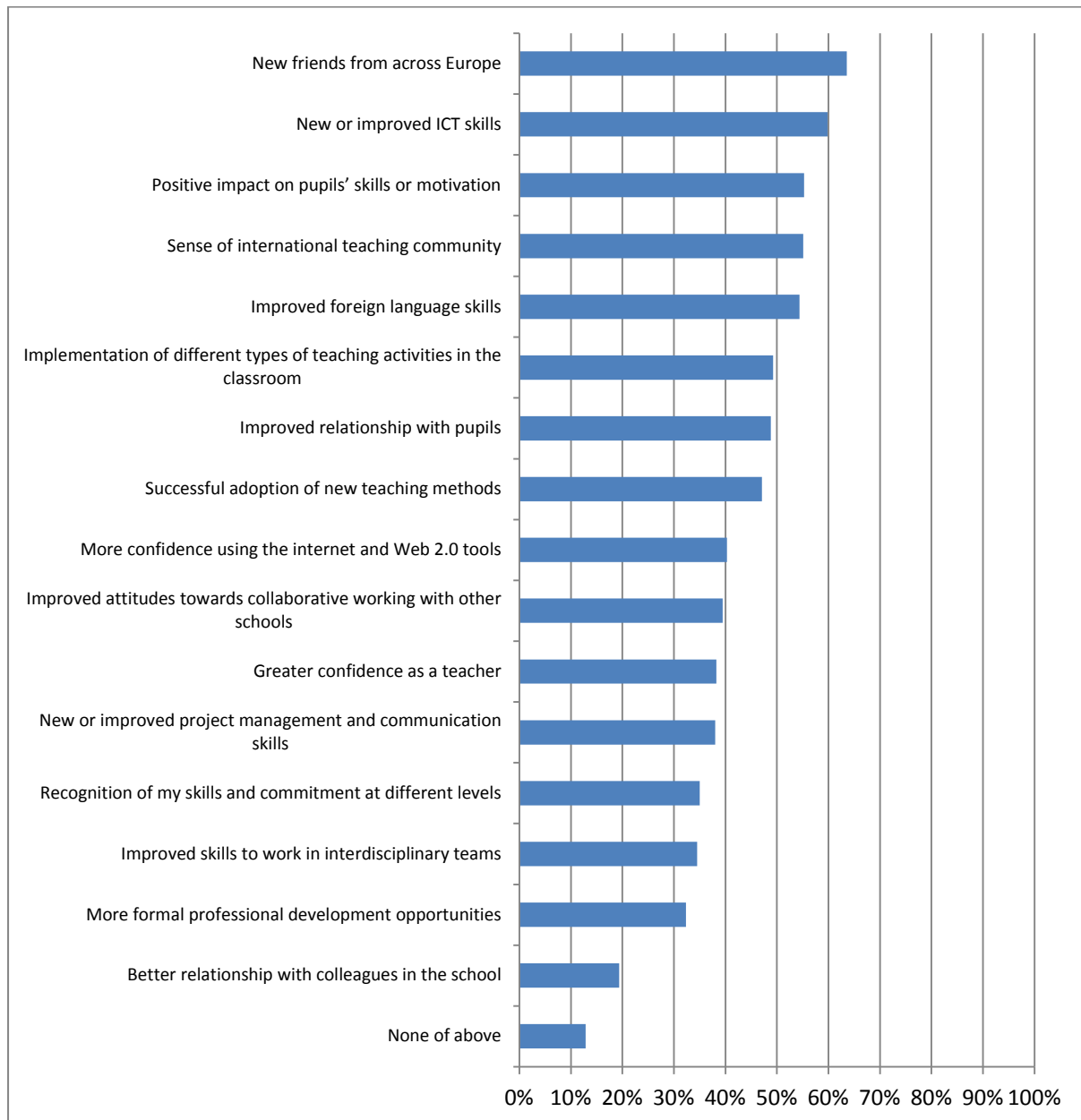
eTwinning by its nature requires project-based approaches to teaching and learning, sometimes introducing these into schools where experience of these approaches is minimal. eTwinning can be credited with contributing to the adoption of this project approach to teaching and learning (e.g. collaborative learning, team work and social skills), irrespective of the specific content or ICT-base of the projects themselves.

4.2.2. Advantages for teachers of eTwinning

The majority of teachers responding to the survey identified five particular advantages of eTwinning (Figure 11):

- making new friends and networking across Europe (64%) (see 4.1.2)
- the acquisition of new or improved ICT skills (60%)
- making a positive impact on their pupils' skills or motivation to learn (55%)
- sense of being involved in an international teaching community (55%)
- improved foreign language skills (54%)

Figure 11: Perceived advantages to teachers of eTwinning: all survey respondents



Improved ICT skills and e-confidence

These results confirm the finding of the CSS monitoring that one of the biggest impacts of eTwinning on participating teachers is in the area of the development of ICT skills and confidence.

This is particularly significant since the profile of participating teachers from the survey suggests that the majority of eTwinners are older, more experienced teachers (see Appendix 1 Figure 32), who have the confidence to take on new teaching initiatives, but who are less likely to start out with sufficient skills and competence in using ICT in the classroom. The case studies support this profile.

For example, in the case study in **Ireland** (a primary special education school), the eTwinning teacher initially was not very confident with ICT and had to spend a lot of time at home learning about how to use the site. She relied heavily on support from the NSS

at first and printed out guidelines to help her use the site effectively - she doesn't feel she needs them anymore. She has a strong sense of pride from this achievement: she knew little about IT and international collaboration and figured it out on her own to establish a successful partnership with a school in France. She feels more confident and her IT skills have improved even over the course of the last year - she finds she is enjoying it more now that she is less daunted by it. These new IT skills have expanded into other subjects, and she finds she is using things like search engines more in other lessons and has the confidence to explore these options. She is also in charge of the new school website.

A sense of an international teaching community

The sense of being involved in an international teaching community and open to the world, which is valued by over half the survey respondents, emerges from several case studies as an important early outcome of engagement with eTwinning. It appears to translate rapidly into more focused professional dialogue with other teachers through making contacts at professional development events or networking online.

For example, in a **Lithuania** case study (Lithuania 2; a secondary school) the participating teachers in this somewhat isolated school cited a broadening of horizons and feeling a part of the world as one of the benefits of eTwinning - one teacher said

"The main thing is that eTwinning allowed me, a humble teacher from a rural school, in a rural place, to find out the world..... eTwinning helped me get in touch with wonders out there, to use them for the benefit of my pupils and my colleagues, and school..."

In **Poland** (Poland 3; a primary school), the eTwinning teachers are motivated by the value they see in opening up to others and seeing other cultures - particularly as the city is small and a long way from bigger cities. They did not have high expectations, but they enjoy the contacts with other teachers.

In **Italy** (Italy 3; an elementary and nursery school) one teacher said that she had not expected to be involved in such a wide network of professionals, which allows her to learn from colleagues. The Ambassador and the other eTwinning teachers regularly use Facebook, as well as an Italian social network for teachers called "la scuola che funziona" (a school that works).

Improved foreign language skills

The need to communicate with colleagues using a foreign language is seen by many teachers as one of the barriers to getting engaged in eTwinning, so it is very positive to see that over half the surveyed teachers did feel that they had been able to improve their language skills once they had got past the initial barrier. Evidence from the case studies suggests that improved language skills are seen by teachers as explicit benefits of eTwinning particularly in those countries where the language group is relatively small and not widely spoken outside the country. The English language, in these circumstances, is usually where teachers are able to build their skills.

For example, in a **Lithuania** case study (Lithuania 2; a secondary school) English is now the main language of communication in the projects, overtaking Polish which was used when eTwinning started in the school. Teachers cited increased proficiency in languages (English, Polish and Lithuanian) as specific personal advantages of eTwinning.

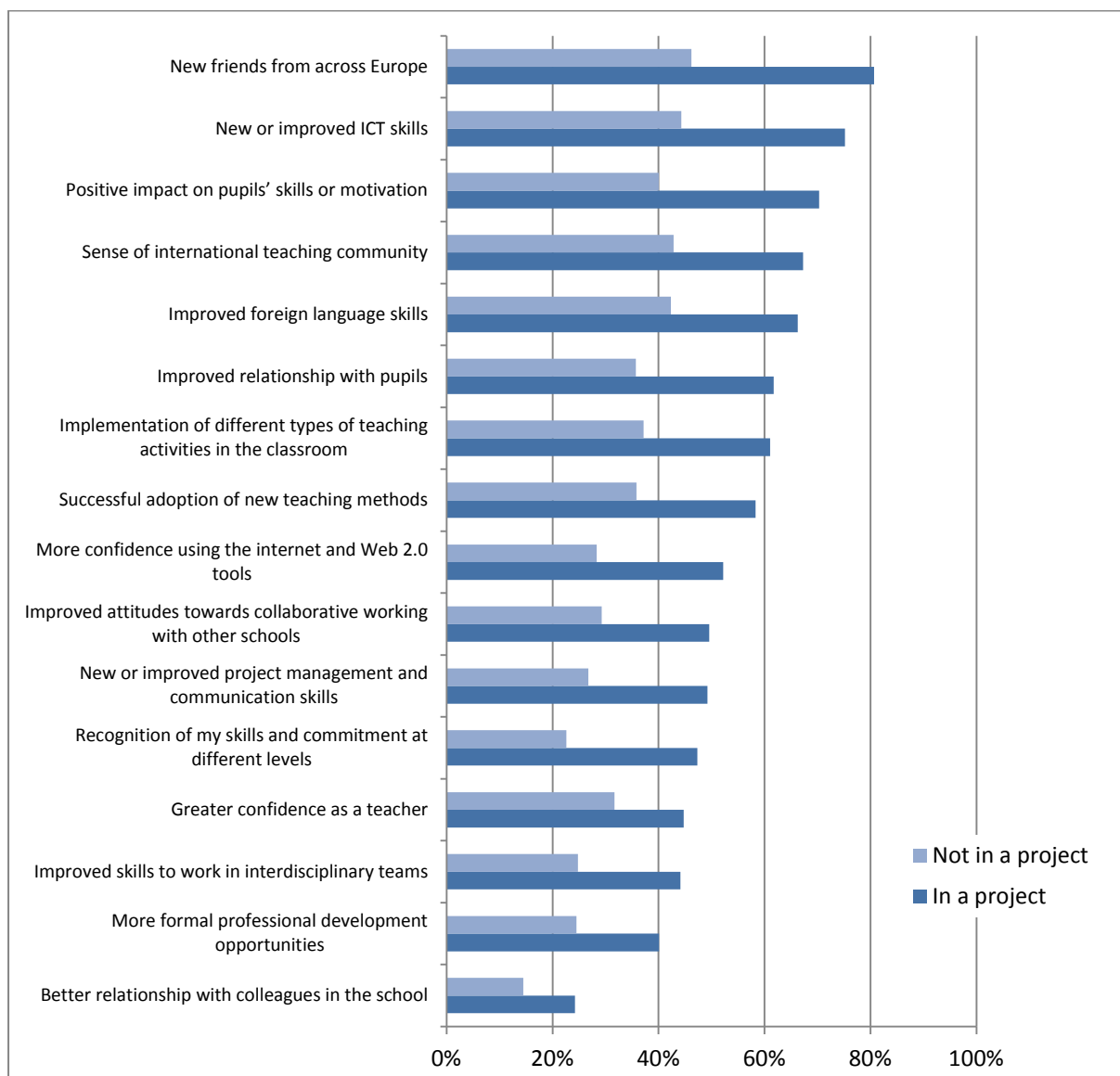
In **Poland** (Poland 1; a primary school) an English teacher started a project in April 2011 around culture, with the hope of finding ways of using English in a real context. Teachers' cooperation and interaction using English was also an important motivation for this project. Teachers talked about their improvement in English, particularly for those who are not English teachers.

4.2.3. Levels of participation in eTwinning

Evidence suggests that eTwinners involved in projects are more strongly positive about eTwinning. Figure 12 shows that less than half of those not involved in projects endorsed the overall top five advantages of eTwinning, while a majority of those in projects endorsed those as well as several other advantages with significant impact on their professional development and on their pupils. These included:

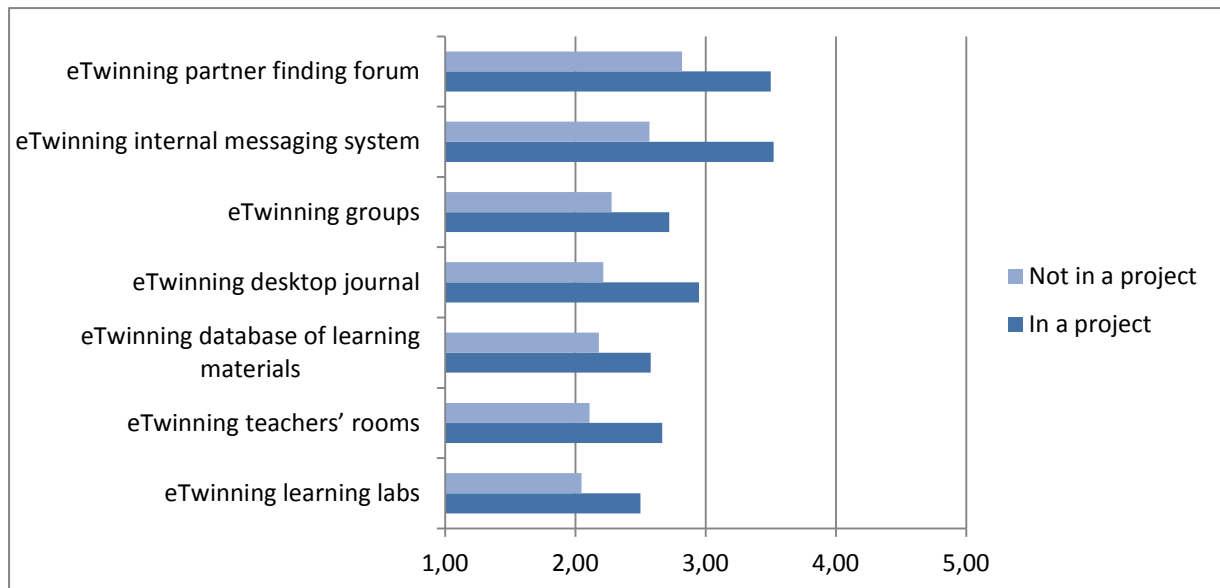
- improved relationship with pupils (62% of those in projects)
- implementation of different types of teaching activities in the classroom (61%)
- successful adoption of new teaching methods (58%)
- more confidence using the internet and web 2.0 tools (52%)

Figure 12: Perceived advantages to teachers of eTwinning: those in projects and those not involved in a project



Moreover, those survey respondents involved in projects also appear to be more active on the eTwinning platform in all other ways than those not involved in projects, including social networking activities, cooperation through exchanging ideas and sending messages as well as collaborative project activities, and participation in professional development activities (see Figure 13).

Figure 13: Participation in non-project activities: teachers currently in a project and teachers currently not in a project (1 didn't know they exist – 5 very active and engaged, regularly contribute)



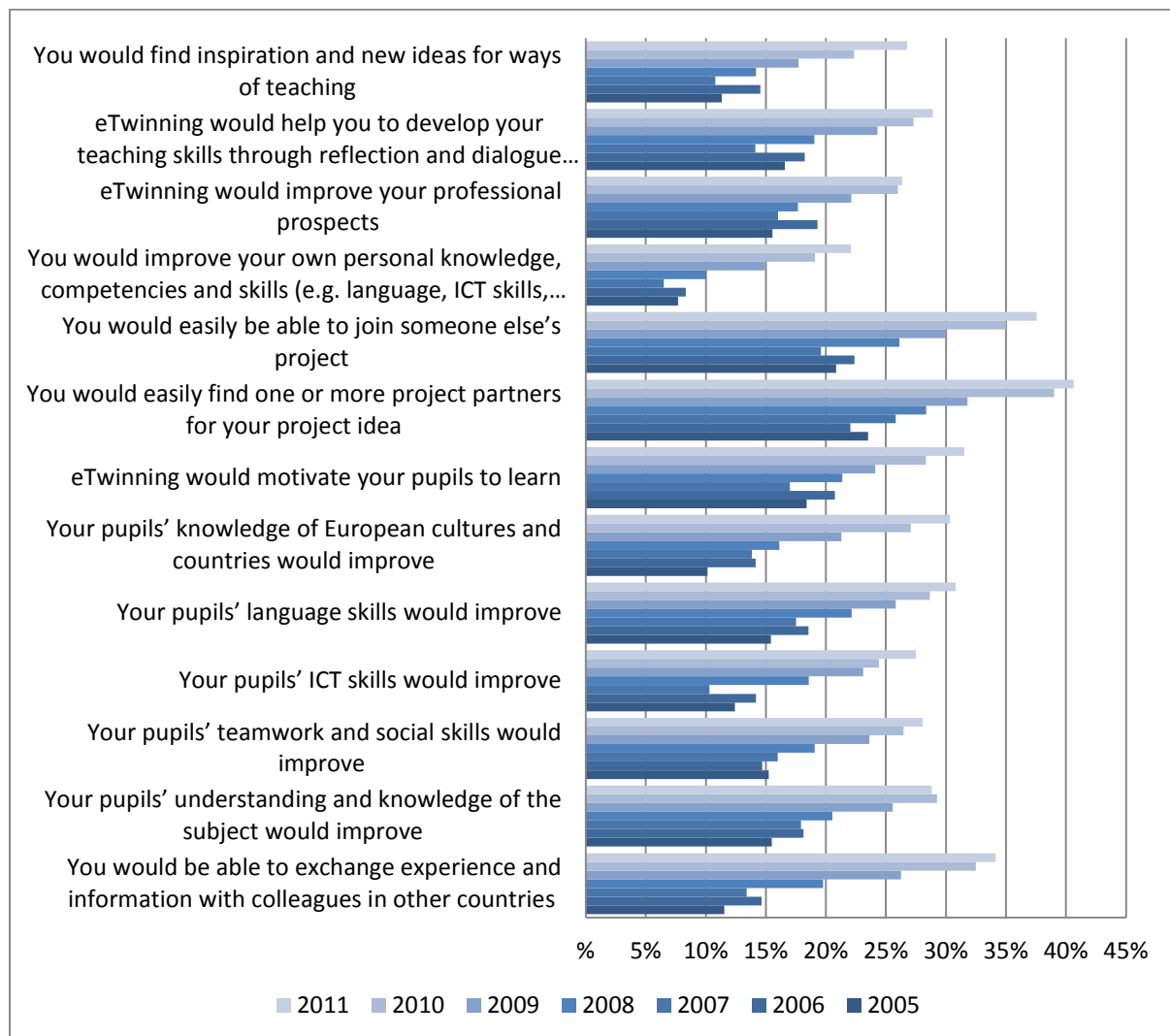
These results suggest the importance for the teachers themselves of getting involved (not necessarily initiating or leading) in a collaborative project, as this involvement appears to unlock the real potential of eTwinning to stimulate both personal and professional achievements and gains, and encourage the teachers to widen and deepen their involvement in professional exchange and networking in many different ways.

4.2.4. Experience in eTwinning

Evidence suggests that experience of being an eTwinner has incremental and cumulative positive impacts, showing that those with years of experience in eTwinning are able to get more out of the programme: contacts have already been built (see also 4.5.4), project experience both positive and negative begins to pay off and potential partners may already be in place for new projects.

Experienced eTwinners tend to have more realistic expectations about what is possible and what is not: the survey results show that those teachers joining eTwinning before 2008 were less likely to feel that their expectations of the programme had not been fulfilled: Figure 14 shows the percentage of survey respondents who indicated that their early expectations of eTwinning had not been fulfilled and the year of their starting in eTwinning. The data indicate that more teachers who are relatively new to eTwinning feel lack of fulfilment, suggesting that a number of years of experience help a teacher to know what to expect, what is possible and what may be difficult to achieve. This could also suggest that fulfilled expectations motivate a teacher to continue their participation and interest in eTwinning.

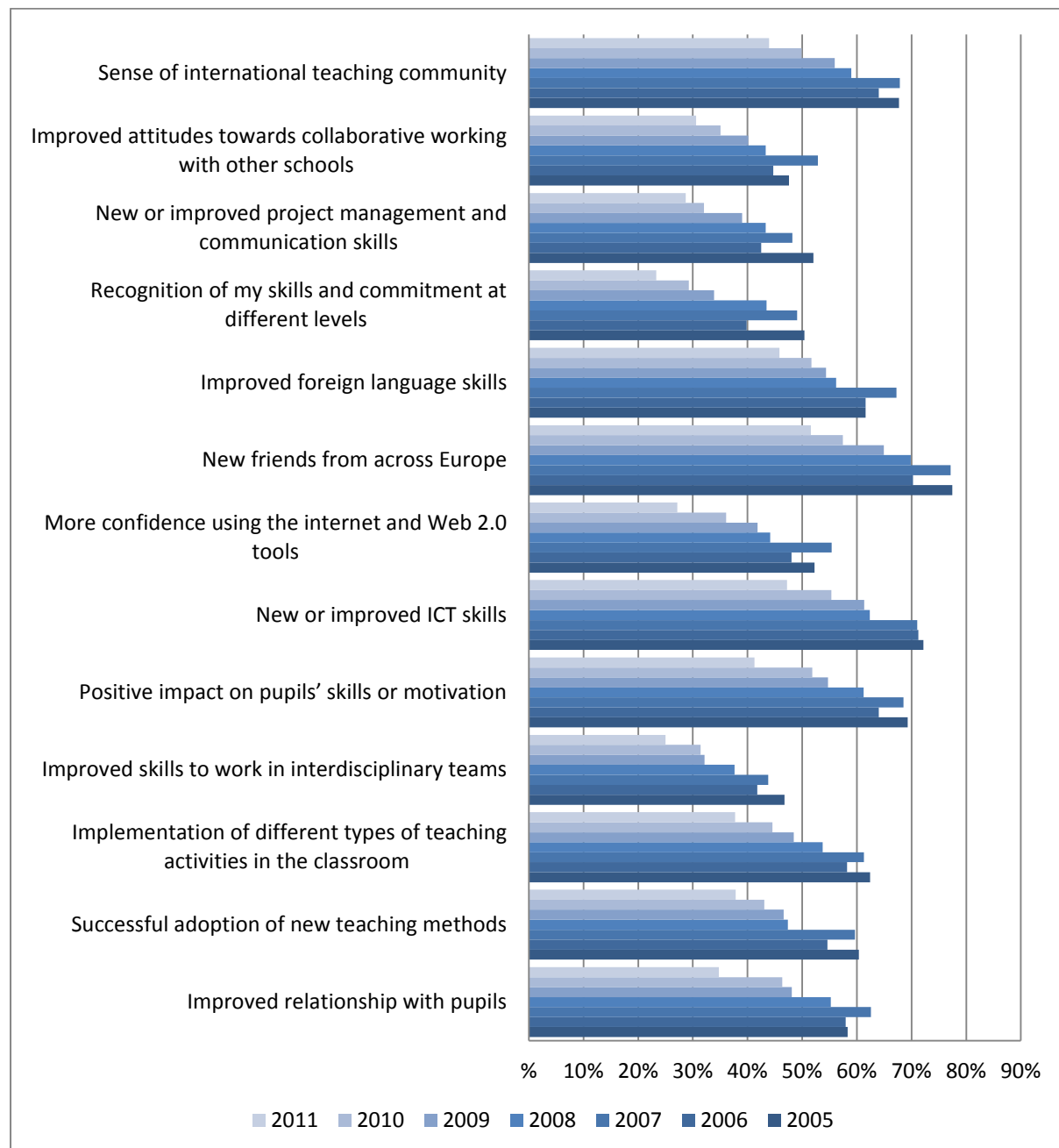
Figure 14: Teachers' expectations of eTwinning that had not been fulfilled and year of starting with eTwinning



Teachers with several years of experience in eTwinning also tended to be more positive about the advantages of eTwinning compared to those beginning during the last two to three years – see Figure 15. Experience appears to have enabled those teachers to try things out and to build on their successes and learn from their failures, particularly in classroom-related and pedagogical areas where more experienced teachers are markedly more positive than those fairly new to eTwinning.

For example, in a case study from **Germany** (Germany 1; a secondary school) all eTwinning projects are coordinated by the same teacher. She had no professional ICT background and no training in this field and had to experiment herself, learning by doing and through trial and error. Even after seven years in the programme she is still eager to enlarge her knowledge and experiment with new software modules. She has a wide network of eTwinning contacts developed over seven years' involvement.

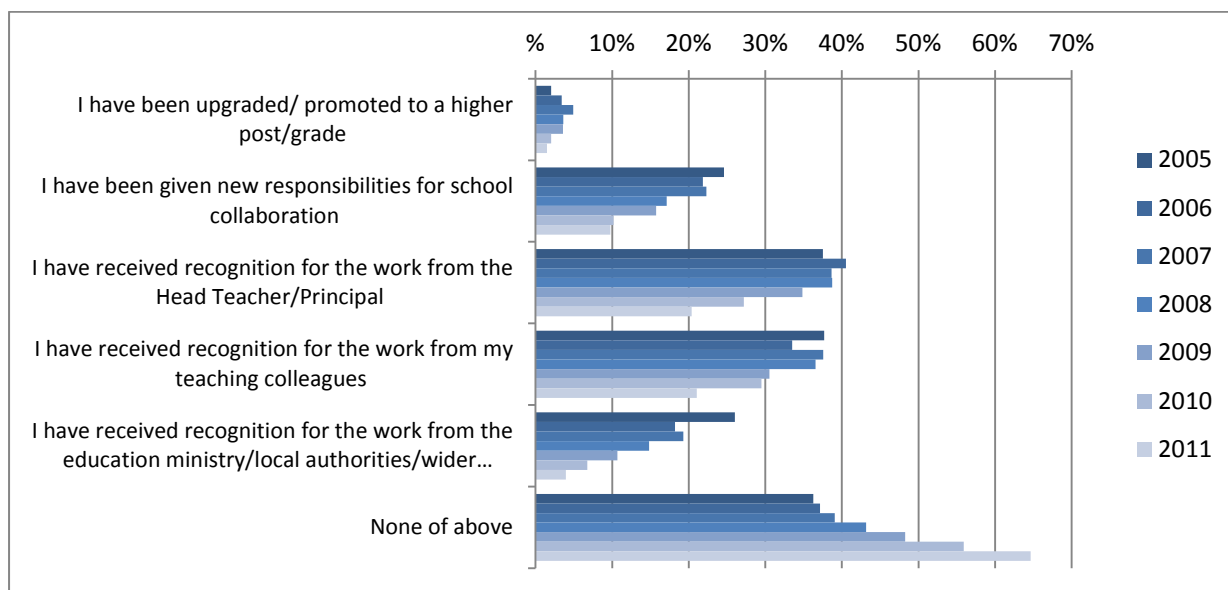
Figure 15: Perceived advantages to teachers of eTwinning and year of starting in eTwinning



These data from the survey all point to the importance of retention of eTwinners year on year, as already noted (3.2.2).

In particular, the survey showed that retention in eTwinning appears to have a direct impact on teachers gaining local or national recognition and status from their activities (see Figure 15). Current rates of retention at 16% (or 1 in 6) are probably too low for eTwinning overall to show any significant improvement in the intractable problem of rewarding teachers (and schools) for their eTwinning activities (see also 4.2.8).

Figure 16: Recognition or change of status because of eTwinning and year of starting in eTwinning



From a more negative perspective, even the most experienced eTwinners still tend to work in relative isolation within their schools.

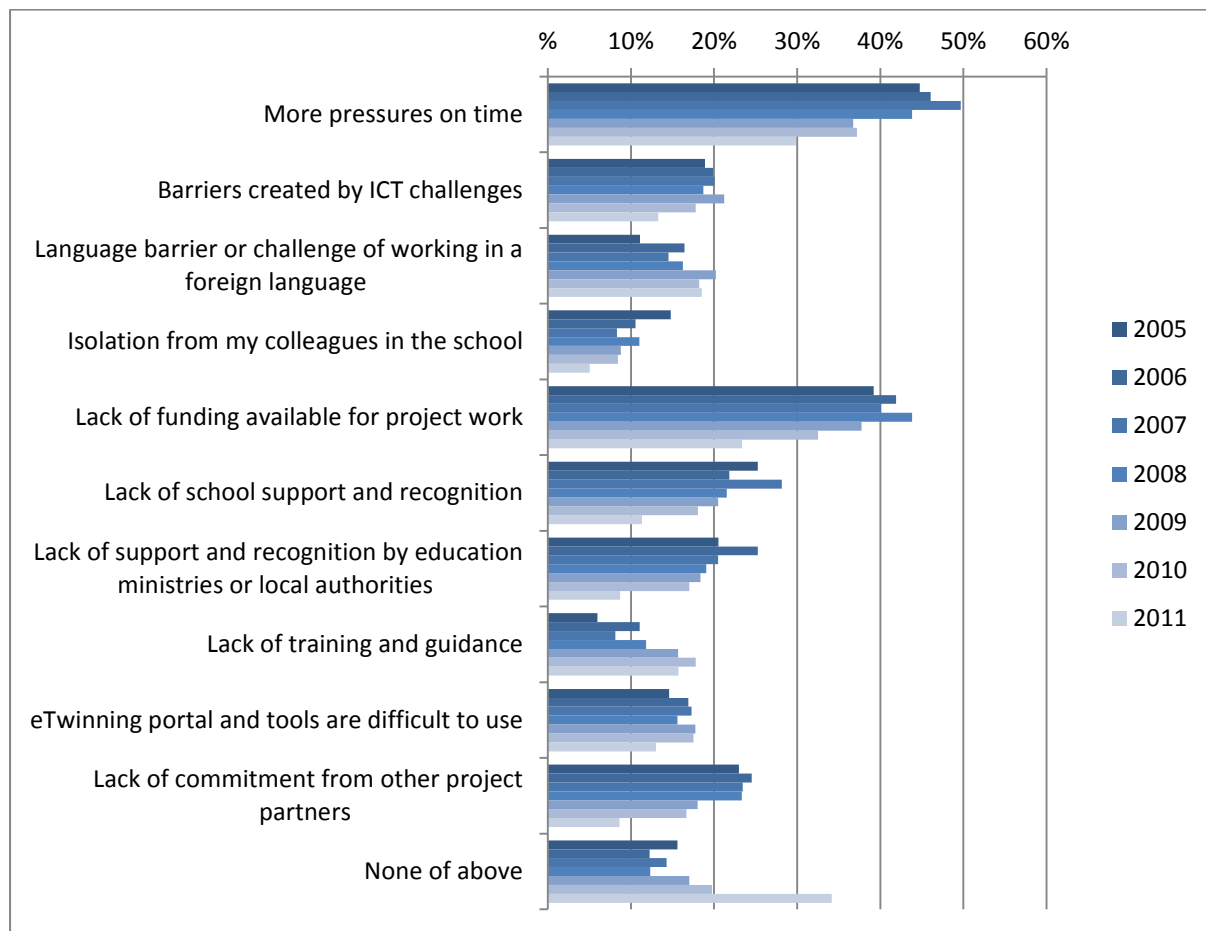
For example, from the case studies, in **Germany** (Germany 3; a lower secondary school) at first, all eTwinning activities were a 'one-woman show'. The coordinator was a new teacher who joined the school from university and immediately started the eTwinning project and, after attending an in-service eTwinning promotion day, she explained possible eTwinning activities to staff and pupils and the school started a two-year project. Activities were explained by the coordinator during staff meetings and disseminated during 'Open Door' days in the school. Posters and displays in corridors explained the eTwinning activities. Most teachers were aware of the activities and results. Although the outcomes were appreciated, the coordinator remained alone in planning and carrying out the activities.

In **Lithuania** (Lithuania 1; secondary school) there is, generally, strong support for the charismatic, main eTwinning teacher personally, who is then able to engage and stimulate other teachers, pupils and administrators to participate, relying largely on her own contacts and experiences. This heavy dependence on the enthusiasm and *modus operandi* of one individual, however, has its risks and disadvantages. eTwinning projects are made up of a great number and variety of tasks, often clustered in series, but the logic and support lie with one teacher, rather than developing into a whole-school, mediated and distinctive approach, influenced by a wider range of teachers and pupils.

Figure 17 shows the survey respondents' views on the disadvantages of eTwinning, analysed by year of starting as an eTwinner: these data indicate that experienced eTwinners seem to feel more keenly their lack of recognition for their efforts, and feel more pressured through lack of time.

The challenges of ICT do not appear to diminish with experience (presumably because technology change keeps pace with the experienced eTwinners' increasing confidence with ICT tools).

Figure 17: Disadvantages of eTwinning and year of starting in eTwinning



4.2.5. Motivation, collaborative working and new teaching methods

As Figure 11 indicates, 39% of survey respondents overall cited 'improved attitudes towards collaborative working with other schools', implying that eTwinning had introduced them to new and innovative ways of cooperative working: 50% of those teachers currently involved in a project endorsed this advantage.

Almost half (47%) of survey respondents overall also cited the 'successful adoption of new teaching methods' as an advantage. From the case studies it is clear that some eTwinning projects are specifically introduced into the school as opportunities to try out new and innovative teaching methods, especially using ICT, and these have been the teachers' first experience of these different ways of working.

Thus, in some cases, eTwinning can contribute to introducing team work and a project approach to teaching and learning and, in others, it fits within and supports an already established culture of project-based learning, which is the main driver of change in teaching methods.

For example, in the **Netherlands** case study (a secondary/vocational school) eTwinning took up one of the two hours of French each week, but only for those taught by the eTwinning teacher - parallel groups taught by different teachers did not participate. It was a big challenge to cover the normal material in much less time, without affecting student results or falling behind colleagues' classes who did not participate. However, the eTwinning teacher was able to link eTwinning work to the lesson plan and design the project to work towards the agreed learning outcomes for this group. The difference is in

the approaches rather than the content, and the eTwinning teacher felt that this method was more engaging for students.

In **Lithuania** (Lithuania 1; a secondary school), on the other hand, the school has a strategy for guaranteeing high quality education, which includes the employment of different teaching/learning methods; it emphasises general competences such as team work, also ICT competence, languages and communication and collaboration skills. Project activities (including eTwinning) are employed as a means of achieving the strategy rather than as stand-alone activities.

In **Austria** (an upper secondary school), despite widespread teacher awareness and involvement in eTwinning, the projects have not directly led to changes in teaching methodologies, class management or uses of ICT in teaching, because teaching in the school is project-oriented anyway and using ICT is integrated across the whole curriculum. So far the eTwinning projects and activities have not involved any radically different or new methods or approaches.

4.2.6. Pedagogical relationship with students

Almost half the survey respondents cited an 'improved relationship with their pupils' as one of the main advantages of involvement in eTwinning (see Figure 11). The case studies reveal that this can typically manifest itself in:

- better and less formal communication and interaction between pupils and teacher
- informal exchange of skills: pupils being often more skilled in ICT than their teacher
- evidence of fun and enjoyment among both pupils and teacher in doing activities

For example, in **Germany** (Germany 3; a lower secondary school) the first eTwinning project triggered a better understanding between teacher and pupils as they were all learning together what to do and how to do it. In the second combined Comenius school partnership and eTwinning project, due to its size and the experience already gained by several teachers, this breakdown of barrier between teachers and pupils is less evident.

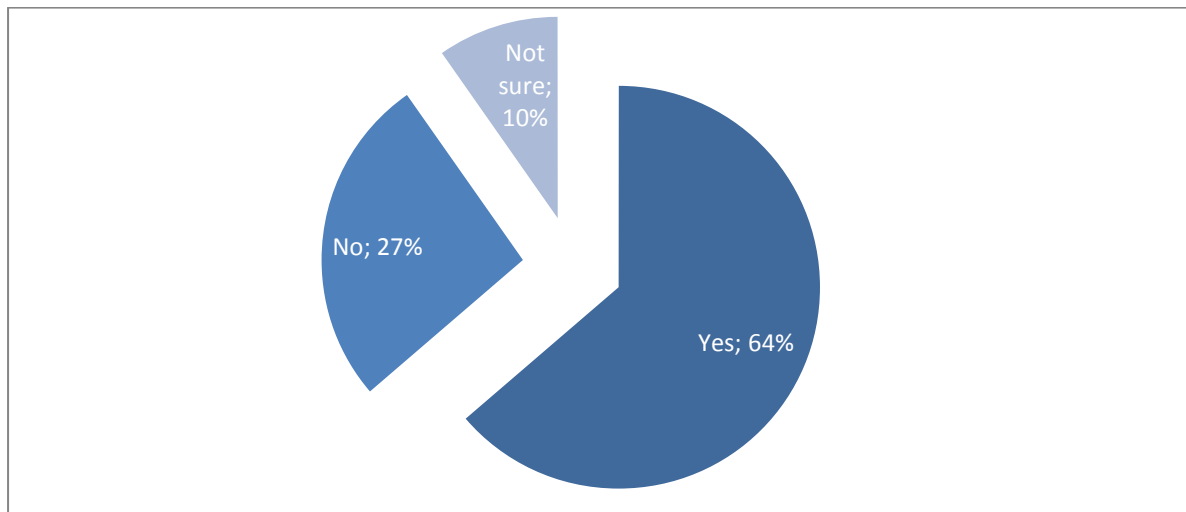
In **Ireland** (a primary school) the teacher recognised the benefits in she and the class learning about ICT together, which has broken down the traditional roles of teacher and pupil. eTwinning lessons are more enjoyable and relaxed than other lessons, with two-way communication and discussion as a group.

Finally, in **Romania** (Romania 2; a secondary school) the pupils enjoyed the lessons and eTwinning gave them a more open attitude to lessons. Teachers said it was easier to judge the enthusiasm and potential of individual pupils than in traditional lessons. Teachers found that they could be more flexible in organising eTwinning activities, including in the selection of learning objectives, themes and sub topics. They used more active and creative teaching methods, and teachers and pupils felt that they could interact more easily and positively.

4.2.7. Collaboration with colleagues inside the school and peer learning

About one in five (19%) survey respondents overall (and 24% of those currently involved in a project) said that better relationships with colleagues within the school are one of the advantages of eTwinning (Figure 11). As noted above (see 4.2.4), even the more experienced eTwinners can struggle to engage their colleagues actively in eTwinning.

Figure 18: Whether teachers have involved other colleagues in eTwinning



However, Figure 18: shows that 64% of survey respondents said they had involved other teaching colleagues in their school somehow in eTwinning, despite possible constraints and barriers. This can mean encouraging other teachers to register as eTwinners themselves and initiate or join projects, or simply collaborating in a project activity in their subject area.

The case studies show that there is considerable diversity in the ways in which colleagues within a school collaborate on eTwinning, and it is important to note that this is not necessarily reflected in the average figure of 1.96 registered eTwinners per school, as the CSS points out (see 3.2.1).

In some schools teachers involvement in eTwinning projects relates to curricular integration, such as in the **Austria** case study (an upper secondary school), where about eight out of 38 teachers are actively involved in eTwinning at any one time. While teacher participation in international and other project activities is expected as part of the school mission and the curriculum, the number of teachers active in projects is limited by the number of subjects and sub-projects developed within each project. As the projects are an integral part of the curriculum, new teachers are drawn into involvement through the timetabling of activities and as part of the school's policy, not as a personal decision. Non-eTwinning teachers in the school are kept well informed about the projects by pupils and in-school conferences and presentations and 70% of them have seen the eTwinning platform.

Similarly, in the **UK** (England; a primary school) the Coordinator is the only registered eTwinning teacher but eTwinning is run as a whole school project, initiated and driven by the former head teacher, and carried out by every class teacher in the school.

The case studies indicate that collaboration within schools typically tends to be 'coordination' of teachers by the main eTwinner to participate in pre-determined project activities within their classes, and the transfer of expertise (typically ICT expertise) from the one or two eTwinners to the other teachers.

The case study in **Germany** (Germany 2; a lower secondary school) serves as an example: eTwinning activities were guided by the coordinator and a second registered eTwinning teacher (Deputy Head), irrespective of the subject content concerned. eTwinning activities were embedded into curriculum areas of English and ICT in grade 10. In addition, some project modules from history, geography and politics were treated as extra-curricular activities, sometimes done at home. In most cases, the teachers of these subjects were not involved in the eTwinning activities.

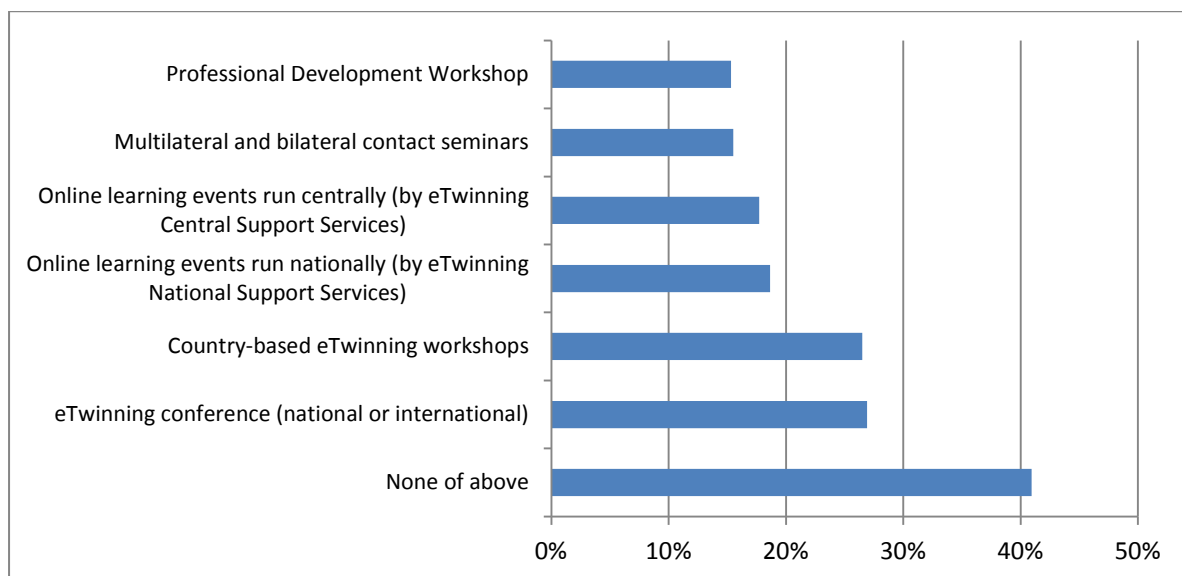
4.2.8. Professional development

The European Commission and the CSS interpret professional development among practising teachers quite broadly within eTwinning (see 3.4.2), to encompass personal development (confidence, communication, personal skills, etc), technical development (competence in using ICT, finding resources etc) and pedagogical development (lesson planning, using new teaching methods etc).

Take-up and use of eTwinning tools and professional development opportunities

The tools offered on the eTwinning platform have all been designed to promote cooperation and participation by teachers with these goals in mind, supplemented by the more formal professional development events and opportunities (run by the CSS or NSSs) that are open to a relatively small proportion of registered eTwinners simply because there are a limited number of places. The survey responses indicate that about 40% of all respondents had not participated in any of the professional development opportunities to date (see Figure 19:).

Figure 19: Participation by survey respondents in eTwinning professional development events



As Figure 10 shows, most eTwinning teachers had expectations about personal development (improved ICT, language confidence, etc.) from their involvement in eTwinning and over 70% had these expectations fulfilled by their experience. In the case study research, it was found that teachers do not normally equate these personal development areas with professional development (as the CSS broadly does), and the teachers tend to take a more traditional view of professional development as mainly participation in workshops and conferences.

A case study from **Lithuania** (Lithuania 2; a lower secondary school), illustrates a typical scenario. eTwinning has provided many opportunities for professional development: two of the main eTwinners are very active nationally and internationally and participate in seminars that the NSS is organising, supporting teachers from other schools and encouraging other teachers in their schools to attend national seminars. Several professional meetings and seminars have been held at the school.

There is evidence of an increase in team work in pedagogical activities and teachers seem to be more confident in working together in teams across different curriculum subjects.

Informal dialogue and exchanges

From the survey data and the case studies it is clear that the opportunities for informal dialogue, exchange of ideas and personal skill development available through engagement particularly in collaborative eTwinning projects has had an incremental professional development impact. Figure 10 indicates that almost 20% of survey respondents did not initially expect eTwinning to help them to develop their teaching skills 'through reflection and dialogue with other teachers', but over 50% had expected this and found it to be true through their experience of eTwinning.

In **Austria** (a secondary school) several teachers reported improved professional satisfaction and sense of achievement. While teachers in the school frequently discuss professional issues with their colleagues on the staff (in formal meetings and informally during breaks etc.), they exchange professional ideas with teachers outside the school much less frequently and only one teacher used social networking online (not on the eTwinning platform) for professional reasons. First and foremost, the teachers regard the eTwinning platform and facilities as tools for project work; the eTwinning Groups and Teachers' Rooms were unknown to most of the eTwinning teachers.

Few staff in the other case study schools had made any use of these social networking tools, although some eTwinners are using other web-based social networking tools to make contacts and exchange views. Among those who had used the eTwinning tools some commented that the huge number of posts, and the lack of content searching or management functionality, meant that following a conversation took time and dedication.

Only a small proportion of the survey respondents were occasional or active users of the social networking and cooperative and professional development activity tools on the eTwinning platform (see Figure 20:): the majority were aware of these tools but had not used them. However, despite relatively low levels of use of the social networking tools, the survey respondents endorsed in principle the positive aspects of using such tools as part of the important informal dialogue and exchange of ideas from working on collaborative projects (see Figure 21). This seems to indicate that there is potential to extend and improve the take-up of such tools if barriers such as time pressures and functionality of the platform can be overcome.

Figure 20: Percentage of respondents using/not using social networking and professional development tools

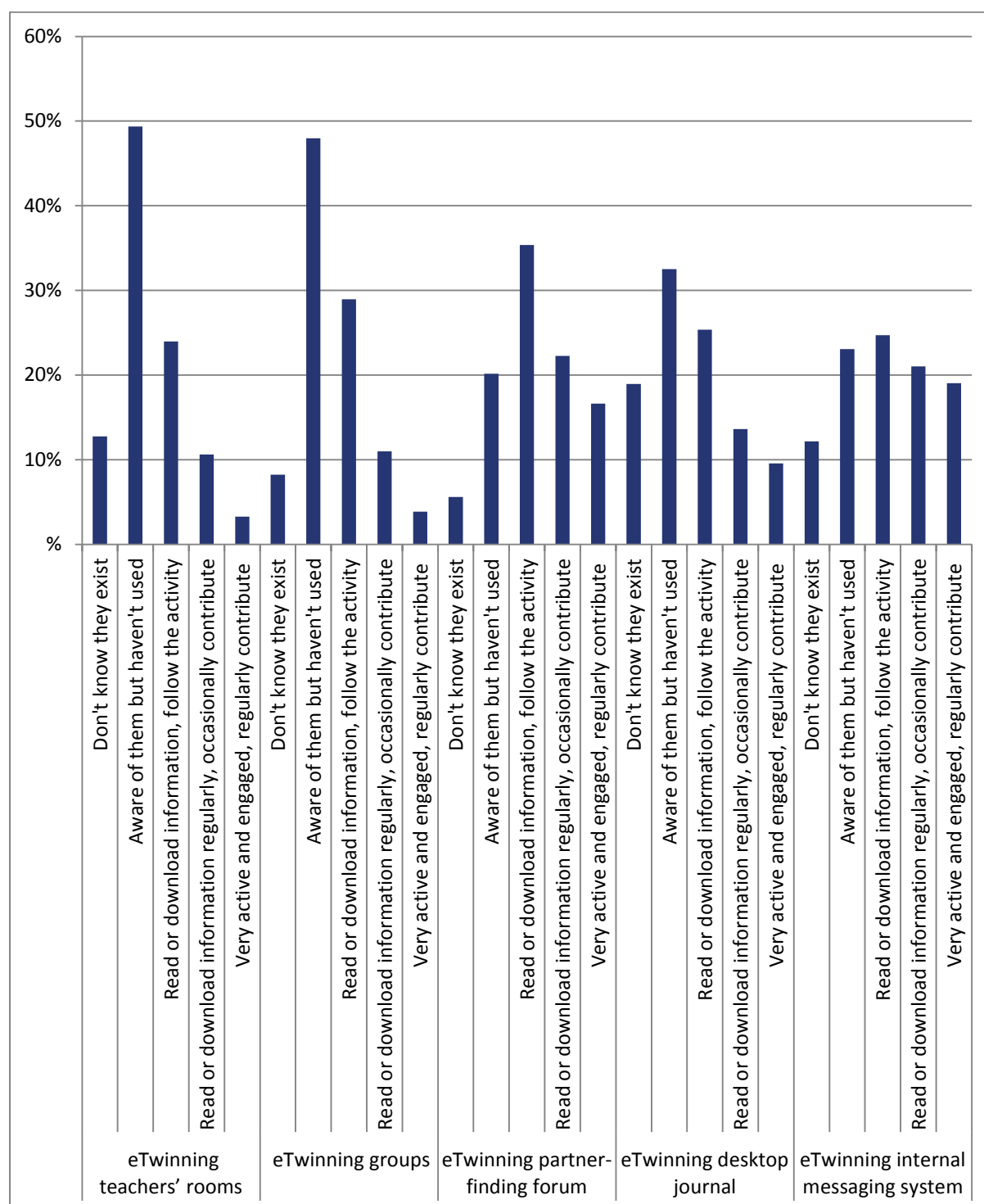


Figure 21: Agreement by survey respondents with statements about social networking tools on eTwinning platform (1 disagree strongly – 4 agree strongly)



In order to better understand levels of teachers' professional development through the use of eTwinning social networking tools, we conducted an indicative content analysis of 11 Groups and 112 Teachers' Rooms on the eTwinning platform in spring 2012 (see Appendix 3 for description of methods and findings).

Understanding the types and qualities of interactions allows speculation about the networking, learning and professional development gains of active participants. The analysis revealed a high proportion of interactions in both Groups and Teachers' Rooms still unrelated to eTwinning projects or teaching methods in general. Many of the messages posted were to greet or thank other members: undoubtedly necessary exchanges in any interactions in a social networking context, but perhaps not to the extent found.

Relatively few posts in any category were on the topic of general teaching methods. In the Teachers' Rooms, the most prolific type of post in this area was sharing links to teaching resources. However, though useful, these posts had failed to stimulate comment or debate: most of the responses to links were of a general or social nature.

Nonetheless, discussion that develops and builds on shared ideas⁵⁰ was happening to some extent: in Groups, it was more focused on general teaching methods, and in Teachers' Rooms posts were more likely to be project specific. This perhaps reflects the more structured nature of Groups, which have clearer leadership and coordination. The

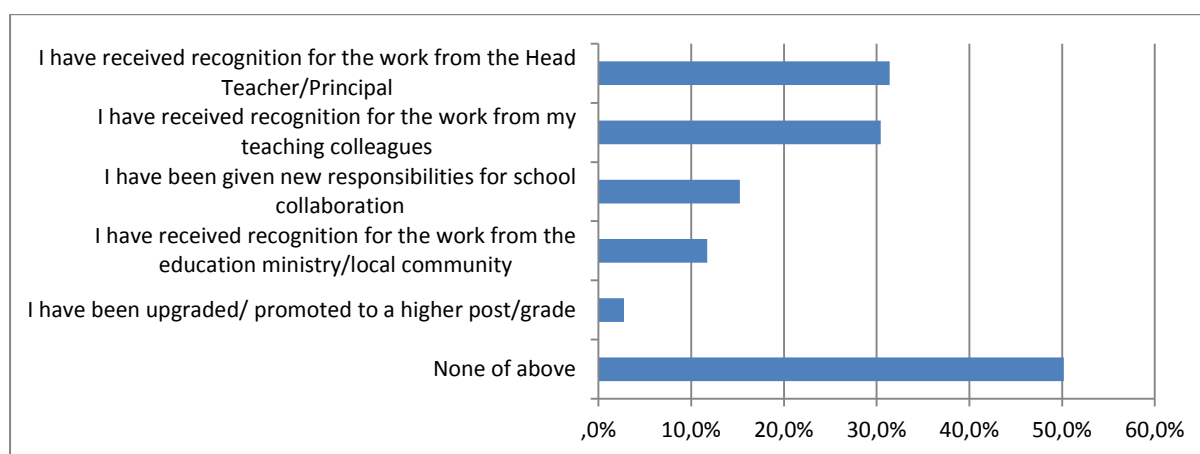
⁵⁰ "the extent of knowledge construction in discussions (i.e. posted articles and replies) is a key indicator for us to understand the depth of teachers' interactions" Huei-Tse Hou, Kuo-En Chang & Yao-Ting sung (2009). Using blogs as a professional development tool for teachers: analysis of interaction behavioural patterns. Interactive Learning Environments, 17:4, p 327

eTwinning Groups pilot study found that “a key factor to emerge was that users require at least some structured leadership, and want input from experts to fuel discussions and idea building”⁵¹. However, in both Groups and Rooms a high proportion of posts that did respond to other comments in the thread, thereby building a discussion, were of a general or social nature (49% and 59%, respectively).

Status and recognition

As Figure 22 indicates, 50% of teachers responding to the survey had received no recognition or changes in status as a result of their efforts in eTwinning. About 30% had been recognised and/or rewarded by the head teacher or received recognition from their colleagues for those efforts.

Figure 22: Recognition of eTwinning work among survey respondents



The case studies reflect a similar situation: in only a few cases have head teachers or local authorities formally recognised and/or rewarded eTwinning teachers. For example in **Italy** (Italy 3; an elementary and nursery school) the eTwinning teachers often work in their free time and get little recognition from the school. A small number of working hours is recognised for eTwinning, but in order to go to eTwinning conferences and events, they need to take annual leave. Nationally, eTwinning projects are not officially recognised and, therefore, teachers do not get extra credit for their work.

In some cases, Quality Labels or national eTwinning prizes have acted as a welcome form of recognition. In a school in **Germany** (Germany 1: a lower secondary school), such awards are a very special event, appreciated by teachers and pupils. In another German school (Germany 3: lower secondary school) the school has proudly displayed their Quality Label in the entrance hall, but school participants were disappointed that no government official, school inspector or community officer attended the short ceremony. However, the Quality Label is mentioned on the Saxony government website under the topic 'Sachsen macht Schule' (Saxony in education). In **Belgium** (secondary school), which has one eTwinning teacher, receiving a Quality Label has resulted in more interest from other teachers, who are starting to register on the site as a result. Quality Labels and national labels can have a positive impact, then, both as recognition themselves and for improving recognition by other members of the school and wider community.

⁵¹ European Schoolnet (2009a). eTwinning: Beyond school projects: a report on eTwinning 2008-2009. Written by Christina Crawley, Anne Gilleran, Santi Scimeca, Riina Vuorikari and Patricia Wastiau. Brussels, European Schoolnet, September 2009. ISBN 978-907820996-6

However, it should be noted that the impact of Quality Labels is dependent on context: they are more highly acclaimed in some countries than others.

Status and recognition is further expanded in 4.5.3 and 4.5.7 below.

4.3. Impact on participating pupils

The approach of eTwinning so far has consisted in targeting pupils indirectly through teachers. There are two main reasons for this:

- Targeting pupils directly has been seen as potentially risking accusations of contravening pupil safety or indoctrination and to conflict with some national norms of behaviour;
- The view is taken that teachers are the most important influence at school level on the quality of education, therefore targeting teachers as multipliers is probably more effective than trying to target pupils directly.

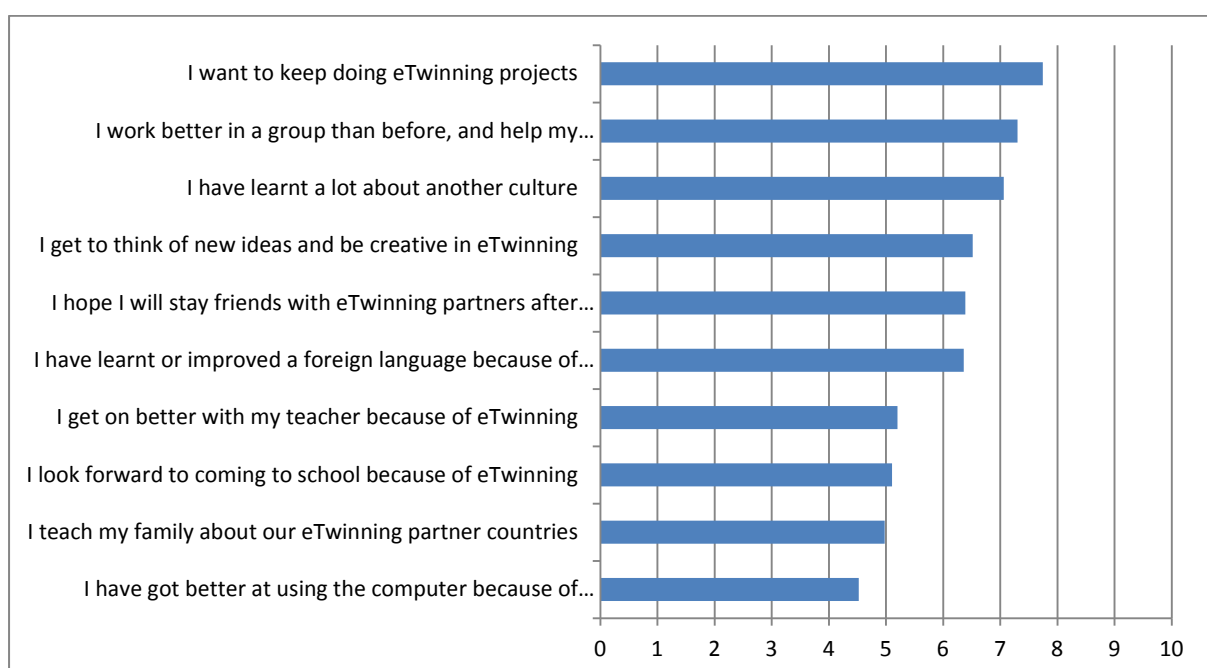
The impact on pupils from eTwinning therefore comes from involvement in projects. There is no direct evidence to suggest that new confidence and skills gained through eTwinning activities and engagement has an impact on pupils outside of an eTwinning context, though there clearly must be some indirect benefits over the longer term. Almost two-thirds (62%) of teachers involved in eTwinning project(s) say relationships with their pupils have improved (see Figure 12).

4.3.1. Pupils' perception of the outcomes of eTwinning projects

In most of the case study schools groups of participating pupils were interviewed and asked to score (from 1 – 10 negative to positive) a set of possible outcomes from their eTwinning activities. The aggregated results of these interviews are shown in Figure 23.

They show evident enthusiasm among pupils for continuing with eTwinning activities, and perceived gains in collaborative and team working, and learning about other cultures in particular. Pupils in case studies did not rank improvement in using the computer very highly, often because they felt they were already confident in using the kinds of ICT tools provided by the eTwinning platform, email and internet searching etc.

Figure 23: Ranking of eTwinning project outcomes by pupils interviewed in case study schools (1 low – 10 high)



4.3.2. Subject areas where eTwinning has made the greatest contribution

An analysis of survey data on the subject area of current projects shows a wide range of subjects where eTwinning has the most impact on different age groups – Table 5 shows highlighted figures of percentages of total projects in that different subject fields by the participating pupils' age.

Table 5: Subject coverage of respondents' current projects: percentage of total projects by age of pupils involved in project (projects can cover multiple subjects)

Subject area of projects	3 or younger	4 to 11	12 to 15	16 to 19	20 or older
Art	3%	54%	42%	21%	2%
Astronomy	2%	44%	40%	33%	6%
Biology	3%	40%	54%	28%	3%
Chemistry	4%	22%	52%	53%	6%
Citizenship	1%	39%	46%	30%	2%
Classical Languages (Latin and Greek)	0%	25%	53%	39%	0%
Cross-curricular	1%	43%	46%	28%	3%
Design & Technology	3%	39%	51%	30%	3%
Drama	3%	54%	43%	20%	1%
Economics	0%	8%	32%	73%	6%
Environmental education	3%	46%	45%	27%	3%
Ethics	3%	34%	48%	41%	3%
European Studies	1%	29%	52%	37%	2%
Foreign Languages	1%	34%	52%	30%	1%
Geography	1%	37%	55%	25%	2%
Geology	6%	33%	47%	42%	3%
Health Studies	4%	43%	45%	35%	3%
History	1%	30%	54%	32%	1%
History of culture	1%	34%	49%	36%	2%
Home economics	4%	37%	47%	29%	1%
Informatics/ICT	2%	39%	50%	28%	2%
Languages and Literature	2%	38%	45%	34%	1%
Law	3%	30%	36%	45%	3%
Mathematics / Geometry	3%	38%	48%	29%	1%
Media education	2%	41%	48%	33%	2%
Music	2%	54%	43%	20%	1%
Natural sciences	4%	53%	44%	23%	3%
Philosophy/ Logic	0%	21%	29%	71%	0%
Physical education	3%	54%	47%	21%	3%
Physics	5%	23%	63%	41%	3%
Politics	4%	13%	42%	77%	4%
Pre-school subjects	15%	92%	10%	4%	4%
Psychology	6%	47%	27%	47%	6%
Religion	4%	30%	54%	31%	2%
Social studies/ sociology	1%	29%	47%	42%	2%
Special Needs Education	6%	58%	52%	26%	6%

For example, the data show that among primary school age groups art, drama, natural sciences and physical education are popular subjects for eTwinning project work; in lower secondary age groups, biology, geography, history, physics and religion are well-covered; and economics, philosophy/logic and politics are clearly popular project topics for older age pupils.

Interestingly, informatics/ICT ranks fairly low for most age groups, though case studies suggest that ICT is usually integrated on some level into projects. This indicates that ICT is not seen by teachers as the main subject of an eTwinning project, but as a method through which they learn about something else, suggesting a more holistic, project-based approach.

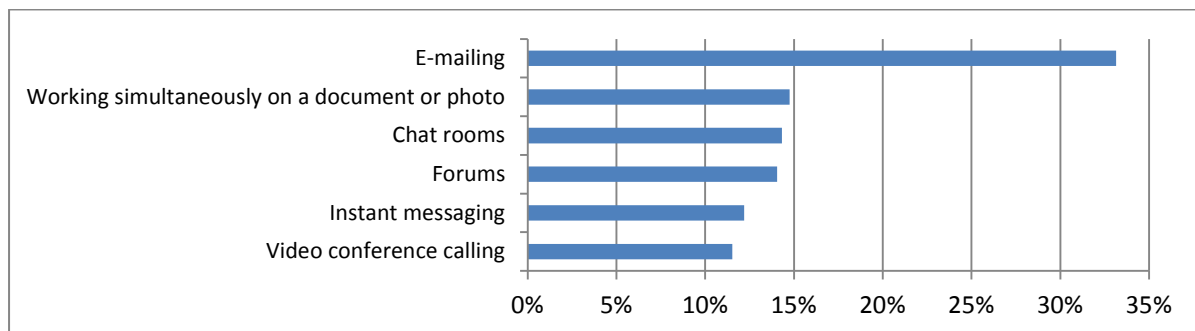
4.3.3. Pupil participation: interactions and empowerment

The survey data and case studies overall show a fairly wide range of communication activities and ways of working with other pupils, from sending letters and drawings on paper through the mail, to sharing videos, blogging and even face-to-face meetings. They show a more limited range of levels of empowerment of pupils, such as responsibility for making decisions and autonomous action.

Pupil-to-pupil communication

How, and how regularly, the pupils participating in project activities are able to communicate with their peers in the project partner schools is evidently a factor that influences the impact of the project on participating pupils – particularly among older pupils. In many projects email is the only form of online communication using ICT (see Figure 24:), and even then pupils are not always allowed to email other pupils directly without passing their work to their teachers first to be approved and possibly edited. Synchronous work by pupils in different countries appears to be unusual, constrained often by timetabling, time differences and lack of appropriately robust ICT infrastructure.

Figure 24: Ways that pupils collaborate and communicate online in a project



For example in the **UK** (England; a primary school with whole school involved) most of the interaction between project partners goes through the teacher: pupils produce a piece of work or a letter, the teacher emails it or posts it to the partner teacher and the partner class then responds. In some classes, there has been success with matching pupils directly as pen-pals, but in most cases this has not been possible – class sizes are different in the two schools, or partner schools cannot be depended upon to respond promptly. However, where this has worked, both teachers and pupils talked about how positive it was in terms of engagement and enjoyment – in one class, they were able to exchange personal emails with their partners at the end of the school year so they could stay in touch beyond the project.

In **Italy** (Italy 3; a primary school) the pupils mainly communicate through letters, whilst exchanging photos online. Pupils said they have continued these relationships through social media such as Facebook, but do not use other ICT tools for communicating.

In **Cyprus** (a senior secondary school), where the eTwinning project and a Comenius school partnership project are fully integrated, the pupils agreed that although they are all used to communicating via social networks, they did not feel nearly as connected to other eTwinning pupils in partner schools until they had the opportunity to meet face-to-face.

eTwinning projects are quite frequently preliminaries (and foundations for) Comenius school partnership projects, and both projects are often run side-by-side and are indistinguishable to participating pupils. Comenius school partnerships allow funding for school exchange visits and in many of the case studies it was clear that, for pupils,

meeting face-to-face with their partner school pupils has a greater and more lasting impact (for example in making friendships that outlast the project).

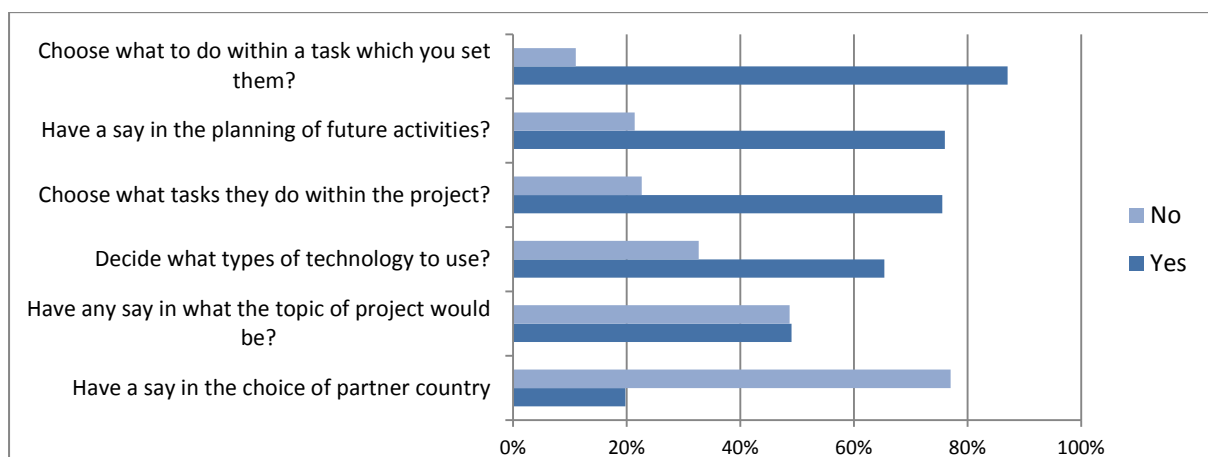
In the **Austria** case study (a secondary school), in the first eTwinning project (integrated with a Comenius school partnership project), the pupils had the opportunity to meet their fellow pupils in partner schools face-to-face several times using mobility funding, and this emerged as the main reason for the pupils' high levels of satisfaction in comparison with the second project in which eTwinning activities tended to merge with other school curriculum activities and had less effect on pupils. The pupils involved in the third project were not very motivated to begin with until pupils from the Belgian project partner school visited Austria.

Levels of empowerment

The case studies indicate that positive impacts of eTwinning projects on pupils are related particularly to the pupils' feeling of empowerment or autonomy of action, especially among pupils over the age of 12.

Figure 25 shows the kinds of involvement by pupils in decision-making in the current projects. The data show that pupils generally have considerable input to decisions about technology use, what tasks and activities to do within a project, and how to undertake those tasks, but they have less input to decisions about topics to be covered in the project and the countries from which their project partners might come.

Figure 25: Involvement of pupils in decision-making in projects: do pupils.....?



The case studies support these findings that pupils' decision-making is generally limited to task level, and that the age of pupils involved in projects does not always trigger greater levels of responsibility and decision-making.

For example, in **Austria** (a secondary school) pupils aged 16-19 have been involved in projects that all had a 'top-down' design approach and there was no involvement of pupils in the early planning phases (e.g. basic project structure, topics chosen). However, in the execution of tasks pupils work independently in their sub-groups and teachers and pupils of sub-projects make their own decisions. Pupils introduce their own ideas and share responsibilities and they are free to choose which ICT tools are used with hardly any restrictions.

In **Belgium** (a secondary school) pupils aged 16-18 are engaged in the eTwinning projects. They are involved in making decisions about the project in the sense that multiple themes are proposed by the teacher and groups of pupils can choose the topic they would like to research. In the past, the eTwinning teacher has allowed them freedom in implementation, but found that pupils did not cope very well with this. They

often decided not to engage with or acknowledge work done and uploaded by the partner school, because they felt it was not what they needed. As a result, the eTwinning teacher plans to opt for a less 'free approach', with more guidance and control of activities.

In **Poland** (a lower secondary school) in a recent project on culture, the teachers made an action plan and displayed it on the Twinspace for pupils to add to and comment on. The Twinspace for this project is managed by two of the pupils in the class, who also administer the school's webpage for the project. The pupils have their own ideas for the project activities, for example trying to start a videoblog. They also created their own Facebook group for the pupils in the project.

4.3.4. Pedagogical change

As noted above (3.4.1), in 2006-2007 the Pedagogical Advisory Group (PAG) of the CSS defined the pedagogical landscape for the eTwinning action and pointed to areas in which eTwinning could make a significant contribution to pedagogical change. We have interpreted these as indicators of the expected outcomes of the eTwinning Action and structured the main findings of the case studies related to pedagogical change around these definitions.

European competences

The descriptions of the competences, knowledge and skills are derived from the table of European competences defined by the PAG (see Table 3).

A

Competencies	Knowledge	Skills	Attitudes
Basic knowledge of Europe and the European Union	<ul style="list-style-type: none"> Gain basic knowledge about Europe and the European Union; countries, institutions, targets, projects etc 	<ul style="list-style-type: none"> Reflect on similarities and difference Discover common roots 	<ul style="list-style-type: none"> Develop an interest in European history and culture, political and social systems

Figure 23: indicates that learning about one or more other European cultures is ranked high by pupils as an outcome of their participation in eTwinning projects in most of the case study schools. Furthermore, a large majority of teachers in the survey confirm that their pupils' knowledge of European cultures and countries improved beyond their expectations after participation in eTwinning (see Figure 10:).

Evidence of pupils' improved competence relating to basic knowledge and understanding of Europe and the European Union exists in a number of case studies, as follows.

For the teachers in the case study in **Sweden** (a small primary school located in a small village in rural Northern Sweden) eTwinning is mainly about European cooperation and removing cultural borders. Young children and teenagers in this school are very isolated and intercultural exchange allows their world to open up a little. Many of their eTwinning partners have a similar profile: small schools set in remote areas of Europe.

Cultural exchange and learning have been very important in all the projects in this school. Pupils have learnt about the differences, and - perhaps more importantly - the many similarities between themselves and their partners. They contacted other people and become more interested and engaged in what is happening in other countries and other parts of the world - the teacher talked about how pupils were suddenly interested in discussing the crisis in Greece because they have contact with a Greek school. This has helped break down national stereotypes and means that pupils can connect events to the project, for example by relating to news stories about partners countries.

In a **UK** case study school (England; a large primary school) eTwinning is run as a whole school project and each class is partnered with a school in a different country. Pupils are excited to learn about new cultures and to receive letters and information from them, comparing their everyday lives. Teachers mentioned improvements in the children's cultural understanding and appreciation of where they fit in the wider world and the wider community.

Pupils often do research work at home for eTwinning projects and this is a way of sharing with their families. Parents appreciate the cultural understanding pupils receive through the projects, something which they may not have had at school themselves, and the benefits of this broader perspective.

B

Competencies	Knowledge	Skills	Attitudes
Ability to study and work in heterogeneous European groups	<ul style="list-style-type: none"> Understand the codes of conduct and manners generally accepted in different societies and environments Understand basic communication rules Know the rules of project management Know the rules of self-management and team work, especially in virtual teams 	<ul style="list-style-type: none"> Plan projects responsibly Work together with other pupils and European partner schools (team work) Develop intrapersonal, interpersonal and intercultural communicative skills: expression and negotiation in different environments 	<ul style="list-style-type: none"> Be open to different opinions and changing perspectives Understand intercultural work as an enrichment and potential for creating synergies

Evidence of the ability to study and work in cross-European groups, to self-manage, work as a team and plan responsibly, exists particularly in case studies where pupils are in older age groups.

In **Belgium** (a secondary school) there is one eTwinning teacher, a human and social studies teacher, who uses the flexibility in the curriculum to form relevant and interesting eTwinning topics that fit into his subject. The learning outcomes for one of the eTwinning projects were positive and satisfactory, with pupils from three partners actively contributing and sharing results. In a past project on education systems, where pupils had more freedom of implementation, pupils often decided not to engage with or acknowledge work done and uploaded by the partner school, because they felt it was not what they needed or useful for them. The eTwinning teacher put this lack of pupil enthusiasm and participation down to allowing pupils to work largely without supervision and detailed guidance. The structure posed a risk that partner schools would get disappointed through lack of feedback or response.

This example demonstrates how gaining competence in studying and working in heterogeneous European groups is not necessarily straightforward even for older pupils. The eTwinning teacher in this case plans to opt for a less 'free approach', with more guidance and control of activities.

In **Romania**, a case study school (Romania 2; a large secondary vocational school) has a strong commitment to European collaboration and ensuring pupils have the skills and opportunities for "integration into the great European family". A recent project was focused on practical knowledge, with tasks on building design: interior design, exterior design, construction, social life of the school, architecture. The school saw the possibilities around working in a virtual space to aid understanding. Groups of pupils, aged 14-17 years old, developed architectural plans for the partner school: furniture design, interior design, an energy plan, a modernisation plan and new organisational

structures. They worked with their own school colleagues and colleagues in the partner schools. They were responsible for organising their work in groups, and became more active in their learning. Pupils were able to reflect on how their schools were perceived from an international perspective, and to communicate effectively to build successful cross-cultural relationships. Teachers, pupils and parents talked about the advantage of making friends from another country. They were able to exercise creativity through the work and get involved in debate and open discussion.

C

Competencies	Knowledge	Skills	Attitudes
Ability to represent one's own culture towards others in Europe	<ul style="list-style-type: none"> Understand the codes of conduct and manners generally accepted in one's own and different societies Understand how national cultural identity interacts 	<ul style="list-style-type: none"> Reflect one's own culture (surroundings at school and at home) especially within the European context Express this reflection in words, pictures, etc. 	<ul style="list-style-type: none"> Develop respect and openness towards the diversity of cultural expression

The case study school in **Cyprus** (a large senior secondary school) provides a good example of pupils reflecting on and representing their own cultural identity. This is a large and very popular lyceum or senior high school located in an urban area with a mixed income profile and pupils aged 15-18. As in other parts of Europe and the Middle East, classes include pupils from immigrant families of Russian, Polish, Albanian and Asian origin. The school has been involved in over 14 eTwinning projects since 2005-06, including two most recent projects on music. One of these – a school band project – has become integrated into a Comenius school partnership project with four other partner schools in four countries.

Several eTwinning pupils commented on their enhanced sense of identity as Cypriots within the European framework, as well as Cyprus as a European country. According to the group, Europe and the idea of Cyprus in Europe was one that had been passed onto them by adults, the media and school. Prior to eTwinning, and then meeting people in the flesh in Holland, the UK and Prague, it had not been 'real' to them. Their preconceptions about other nationalities and the way non-Cypriots might view them were either too general or too stereotypical. They were neither confident about themselves as individuals, nor particularly positive about the way they were viewed by others, as Cypriots.

A case study school in **Italy** (Italy 3; an elementary and nursery school) provides evidence of the early development of these competences and skills among younger pupils. A high proportion of pupils are from families of migrants or Roma people. eTwinning was introduced with the expectation of providing opportunities for pupils from deprived backgrounds, making connections through new languages and cultural exchanges, and helping pupils to feel less isolated and excluded. There have been nine projects in total in the school since 2008, including projects on culture and history, and on friendship. Pupils exchange information and talk about their different perspectives on these topics with their partners abroad. One of the most positive outcomes was the similarities pupils found with the school in London. Pupils were surprised to find the school also has a large proportion of pupils from migrant families, and pupils were happy to talk about religion and culture with their partners (Islam in particular was mentioned).

D

Competencies	Knowledge	Skills	Attitudes
Be aware of the values and systems of democracy as a basis for responsible citizenship	<ul style="list-style-type: none"> Understand the concepts of democracy, citizenship, civil rights, especially in the context of the EU 	<ul style="list-style-type: none"> Try to solve problems affecting local or wider communities Reflect critically and creatively on political issues and participate actively 	<ul style="list-style-type: none"> Develop fairness, respect and a sense of equality as well as identification and acceptance of one's self and others

Responsible citizenry was the theme of a project in a case study school in **Germany** (Germany 2; a lower secondary school), closely involving parents and the wider community. The school has pupils aged 10-16 and is located in a small country town in a very remote rural area. International cooperation is prominent in the school and the eTwinning coordinator is very active, as are the parents – the head of the parent-teacher committee said that they give this kind of activity their full support, because “our children have acquired autonomy and learn to become good citizens”.

In a recent project, the theme of environment was introduced because of concerns about pollution in the area resulting from major renovation works. To tackle the situation from a psychological perspective, the parents - with the coordinator - promoted an eTwinning project with partner schools that were also directly affected by major environmental problems. Thus they wanted to demonstrate that they were not alone with their worries but that others share a similar burden in other countries.

The decision about which theme to choose for the project was taken by teachers and parents in the parents' association but they were sure it matched pupils' interests. Decisions within the project about what activities to pursue are taken in a democratic and participatory way involving pupils and in general, the pupils think that they have got a deeper insight into the thinking of their foreign partners.

E

Competencies	Knowledge	Skills	Attitudes
Communication in two other foreign languages	<ul style="list-style-type: none"> Have a working knowledge of the main vocabulary and functional grammar Have a basic knowledge of language sciences 	<ul style="list-style-type: none"> Understand spoken and written messages Initiate, sustain and conclude conversations Read and understand texts 	<ul style="list-style-type: none"> Develop a positive attitude towards communication Appreciate cultural differences and diversity

English dominates in the case studies as the language of project collaboration and evidence of pupils' acquiring competence and skills in more than one foreign language is minimal. However, foreign language gains overall are among the most frequently cited outcomes of project work cited by both teachers and pupils.

In the case study in the **Netherlands** (a large secondary school), younger pupils, aged 13-14, are currently engaged in eTwinning. The eTwinning activities have been based around the French language, using it to communicate and find out more about each other. Recent projects, with a range of partners, have focused on writing informal letters to and reading and answering letters from their peers in the partner schools, and creating PowerPoint presentations.

One of the main advantages of using eTwinning to implement the curriculum, according to the eTwinning teacher, is that pupils have become more motivated and more active in their participation because of the communication and collaboration with foreign

counterparts. This motivation appears to be reflected in their grades: the results obtained by the eTwinning pupils for exams and tests in the subject were better than other groups in 2011. The eTwinning teacher had expected that these activities would make things more interesting and more real for pupils, because they were truly communicating in French, but had not expected that the group would actually achieve higher marks for the regular exams.

The positive results are starting to influence others in the school: this year, another French language teacher registered for eTwinning and a German language teacher is considering initiating an eTwinning project.

In a **Lithuania** a multi-cultural school case study (a secondary school) delivers the curriculum in Polish and Lithuanian. eTwinning, according to the pupils, has contributed to their language proficiency in Lithuanian, Polish and English. The working language of the projects is English, but cooperation with a school in Poland enables Polish-medium pupils to get in touch with the living language of the country rather than Polish as it is spoken within their somewhat isolated families. Proficiency in Lithuanian also increases, for both Lithuanian and Polish language groups, because reporting and reading are also done in Lithuanian.

F

Competencies	Knowledge	Skills	Attitudes
Digital competence and use of ICT	<ul style="list-style-type: none"> Know the challenges and possibilities of ICT in personal, social and work contexts Know how to use UICT for one's own expression and collaborative networking 	<ul style="list-style-type: none"> Search, collect, select and process information in a critical and systematic way Produce, present and understand complete information Use ICT for creative and innovative purposes 	<ul style="list-style-type: none"> Develop a critical and reflective attitude towards all information Use interactive media responsibly

Despite the fact that the pupils in many of the case study school played down the impact of eTwinning on their ICT skills (see 4.3.1) improved digital competence and ICT skills are cited by many of the eTwinning teachers as positive outcomes of projects: for example:

In a case study in **Poland** (Poland 2; a lower secondary school) ICT plays a very important role and the school aligns with the Polish National ICT programme goals: teachers are encouraged to use ICT during their subject lessons and report to the head teacher; they also use the eLearning platform with their pupils. There is very good ICT infrastructure in the school. eTwinning is seen as part of a whole school strategy towards ICT, languages and international exchange.

In two eTwinning projects information research and exchange via the internet, the production of photo and multimedia products as well as the creative use of the eTwinning Twinspace engaged pupils in autonomous tasks.

Pupils enjoyed learning about and practising ICT and had gained knowledge of new internet and learning platforms; they had improved skills in creating websites, attaching files, making and editing films and photos and making presentations.

Impact on learning and teaching methods includes an increase in the use of ICT during subject lessons, aided by the purchase of interactive whiteboards. Activities are more diverse and engaging, and include pupil presentations, film/computer editing, use of a Moodle platform and of online portals during lessons.

In a **UK** case study school (Scotland; a primary school) located in a poor area, the head teacher decided to join eTwinning as a tool for use in the Comenius school partnership, in the expectation that eTwinning would allow them to communicate more easily with their partners, through sharing photos and having pupils communicate directly with their pen-pals. Despite technical problems the pupils were able to do some activities on the Twinspace, including looking at and uploading photos, sharing recipes, playing games from different countries and leaving messages on other pupils' pages. They also created their own photo boards online and set up profile pages and small blogs about themselves for their partners to see. The pupils' communication skills improved through blogging and communicating with partners on the eTwinning site, and their ICT skills improved through using the site and sharing photos.

Collaborative learning

The two aspects of eTwinning that stimulate and underpin collaborative learning are the project-approach to learning and the ICT-based tools that facilitate this and encourage pupils' engagement and use of ICT. These aspects, their contribution to learning and a range of positive outcomes are evident in most of the case studies. Learning collaboration is also evident in many of the case studies, to a greater or lesser extent; its successful introduction into an eTwinning project is dependent on many different factors, including the overall culture of the school, the subject(s) covered in the project and the extent to which these are integrated into the school curriculum, and the nature and circumstances of other project partners.

Collaborative learning can take several different forms:

- *Collaboration between pupils and teacher on new or innovative activities* Successful outcomes are often dependent upon the confidence of the teacher and the changing nature of the pupil-teacher relationship: for example, in the case study in **Ireland** (a primary school) the teacher recognised the benefits in she and the class learning about ICT together, which has broken down the traditional roles of teacher and pupil. eTwinning lessons are more enjoyable and relaxed than other lessons, with two-way communication and discussion as a group.
- *Collaboration between pupils in the same class and occasionally with pupils in different classes or grades* This appears to be the most common form of collaborative learning. An example from **Italy** (Italy 1; a primary school) is quite typical of projects among younger age groups: around 15 pupils communicate with their partners through the Twinspace and through sharing letters, photos and pictures in hard copy. One of the main impacts on the pupils has been in their attitude to each other and there has been an increase in collaboration and team working. New friendships within the school have been formed from working closely together on projects. In one case study from **Lithuania** (a secondary school), among pupils between 15-20, improved social skills and communication (written and spoken) were evident among the pupils participating in eTwinning activities: ability to work as a team, to provide support and to ask for support were noticed by parents and pupils.
- *Collaboration with pupils' peers in project partner schools* Direct, pupil-to-pupil collaborative learning is less evident in the case studies than collaboration in local teams. There are obvious constraints on team activities (for example, joint planning of activities and joint discussion) when ICT infrastructure and equipment provision differs between partners; when time differences and timetabling may make it impossible for pupils to be working on the project at the same time; when communication between partners has to be mediated through teachers, etc.

The **Belgium** case study school (an upper secondary school) provides an example of a successful project based around human rights and punishment where pupils

collaborated directly and well with their partners in Sweden and Greece. The aim was for pupils to compare attitudes towards punishment, and the death penalty in particular, between countries and between groups within these countries. The partners developed a questionnaire, adapted to the language and country context, the results of which were analysed by the pupils and discussed by partners through video conferencing and chat rooms. Pupils used audio and video conferencing, chat, e-mail, forums, and general software (word processing, spreadsheets, presentations, pictures and drawings), as well as the Twinspace, to prepare questionnaires, develop presentations and discuss results interactively as well as offline.

Authentic learning

The concept of 'authentic learning' – when pupils believe the problems they are solving or the questions they are asking are real, related to life and to their own experience of it – is highlighted by the PAG. eTwinning case study projects provide a number of examples where the benefits of authentic learning have been felt by pupils and teachers.

These benefits are often associated with language-learning; for example, in the **Netherlands** case study (a secondary vocational school) eTwinning activities have been based around the French language, using it to communicate and find out more about each other. The emphasis was not on 'perfect French' (grammar, spelling etc.) but on confidence in communication, and the teacher believes that exchanging letters with peers in their age group helps pupils to overcome inhibitions and is more fun.

The main advantage of using eTwinning to implement the curriculum, according to the eTwinning teacher, is that pupils get much more involved if they are communicating directly with pupils from other countries and know that what they have produced will be seen and read by a real audience. Pupils have become more motivated and more active in their participation because of the communication and collaboration with foreign counterparts.

There is also evidence that authentic learning in eTwinning arises from the independent and innovative use of ICT: for example, in a **Poland** case study (Poland 3; a lower secondary school) the benefits experienced by pupils included better knowledge of subjects studied in eTwinning, and improvements in their English communication skills. Pupils particularly enjoyed learning about and practising ICT and had gained knowledge of new internet and learning platforms; they had improved skills in creating websites, attaching files, making and editing films and photos and making presentations.

Use of ICT

eTwinning has provided a catalyst for improvement and investment in ICT equipment and infrastructure in a number of case study schools (see 4.4.1. for example) with a consequent positive impact on pupil participation and learning through ICT use.

The case studies provide evidence of pupils effectively using ICT to learn, experimenting with different media and using eTwinning as an opportunity to exercise and extend their skills; these aspects are illustrated under European competences: digital competence and using ICT (F) – see above.

However, as the Eurydice report confirms (see 2.3) the disparities between schools, countries and regions in ICT availability and broadband access persist. The case studies also reveal considerable differences in level of ICT access and in school policies on using ICT (for example, as a curriculum subject in itself or integrated across the whole curriculum), which clearly influence whether or not pupils experience direct and lasting gains from ICT use in learning through eTwinning projects (see Appendix 4 for a summary across case studies).

Pedagogical relationship between teacher and learner

As Figure 23: shows, an improved relationship with their eTwinning teachers is given reasonable endorsement as a perceived outcome among participating pupils, supporting the teachers' views that eTwinning offers opportunities for a more informal, collaborative relationship to develop between teacher and pupil: examples from the case studies to support this view are given above (4.2.6).

On a broader level of impact assessment, we have used the PAG's model of the move towards self-directed and exploratory learning and how the teacher-learner relationship can change (Table 4), modelling project activities in terms of content, responsibility and pedagogical relationships. According to the PAG, characteristically the teaching and learning situation in most schools will be in categories a or b for all three aspects.

The PAG suggested that, if eTwinning were to achieve the objective of facilitating more collaborative, independent and exploratory learning, eTwinning project activities would need to 'move to the right-hand side of the table', into categories c or d, with a pedagogical relationship between pupils and teachers having the features of categories b or c.

The PAG also suggested that "if the teacher is really willing to learn collaboratively with the pupils...then we have a learning environment situated at the far right hand side of the table"⁵², that is d, or c and d.

We have made a (subjective) assessment of the evidence from our case study schools to place each case study within the parameters of the PAG model (see Table 6). Even allowing for the many variables in schools, external circumstances and approaches to eTwinning (e.g. levels of curricular integration, partner competences and circumstances etc.), the majority of the case studies have achieved the objective of facilitating more collaborative, independent and exploratory learning through eTwinning (mainly located in categories b and c; while a few case study schools have moved further in changing the pedagogical relationship between pupils and teachers through real collaborative learning (categories c and d).

⁵² European Schoolnet (2006b) Reflections on eTwinning: pedagogical issues in eTwinning. Written by Conor Galvin et al for the Pedagogical Advisory Group. Brussels, European Schoolnet, October 2006 p 5

Table 6: Where the case study schools lie in relation to the PAG model of how the teacher-learner relationship can change

Content			
a Strongly theory directed, curriculum based	b More theory directed, curriculum based	c More practice oriented, problem based	d Strongly practice oriented, problem based
Netherlands (13-14) Ireland (11-12) UK England (4-11) UK NI (3-20)	Austria (16-19) Germany 3 (10-15) Italy 3 (9-11) Lithuania 2 (12-16) Poland 3 (7-12) UK Scotland (4-11)	Belgium (14-18) Cyprus (15-18) Italy 1 (7-14) Poland 1 (6-13) Poland 2 (13-16) Romania 1 (8-12) Sweden (7-16) Romania 2 (14-17) Romania 3 (14-18) Lithuania 1 (16-20)	Italy 2 (15-18) Finland (13-14) Romania 2 (14-17) Germany 1 (14-16) Germany 2 (10-16)
Responsibility			
a Teacher centred	b Teacher sometimes hands over responsibility to learners	c Teacher mostly hands over responsibility to learners	d Learners have full responsibility
Italy 2 (15-18) Sweden (7-16)	Austria (16-19) Germany 1 (14-16) Italy 3 (9-11) Lithuania 1 (16-20) Romania 2 (14-17) UK England (4-11) UK Scotland (4-11)	Germany 2 (10-16) Ireland (11-12) Romania 1 (8-12) Sweden (7-16)	Belgium (14-18) Cyprus (15-18)
Pedagogical relationship			
a Teacher is expert, pupil learns	b Some of the teacher activities are coaching	c Teacher has a coaching, facilitating and supportive role	d Teacher is actively participating in the learning process alongside students
	UK England (4-11)	Belgium (14-18) Cyprus (15-18)	Ireland (11-12) Romania 1 (8-12) Romania 3 (14-18) Germany 3 (10-15)

The name of the case study and the age of pupils engaged in eTwinning activities is given (in parentheses)

Active participation

Fun and enjoyment figure in most of the case studies as pupils' benefits from their eTwinning project activities – especially those involving direct (not necessarily synchronous) communication with their peers in other partner schools, and most particularly when they are able to meet face-to-face with them, where eTwinning projects have found funding for mobility or developed into a Comenius school partnership.

There is also evidence that confirms that pupil participation in eTwinning projects has had impact on various aspects of pupils' attitudes towards learning, towards their peers and in their motivation, particularly confidence-building and self-esteem: confidence in their own abilities, particularly in language and communication. For example, in a case study in **Italy** (Italy 2; a secondary vocational school) pupils' confidence and ability to write in English has improved. The teachers had not expected the positive effect seen on pupils' self-esteem, especially on the more timid ones. Pupils themselves are proud of their ability to write in English and of having friends abroad and, in general, they feel less isolated because of international projects.

And in **Cyprus** (a senior secondary school) one pupil said that he was initially very reluctant and suspicious about getting involved in eTwinning (and Comenius school partnership) activities, with no confidence in his inter-personal skills and therefore not particularly hopeful about making contact with people or being accepted in the larger group of participating pupils in his school. It took him a while to believe that he was a fully accepted member of the group and that people treated him the same as everyone else. Another was transformed by the experience; his behaviour changed and he became a lot more sociable. He, also, stopped feeling inferior and was happy and proud to be able to call the rest of the eTwinning pupils in the school his friends, especially the core groups who also happened to be confident and popular among their peers.

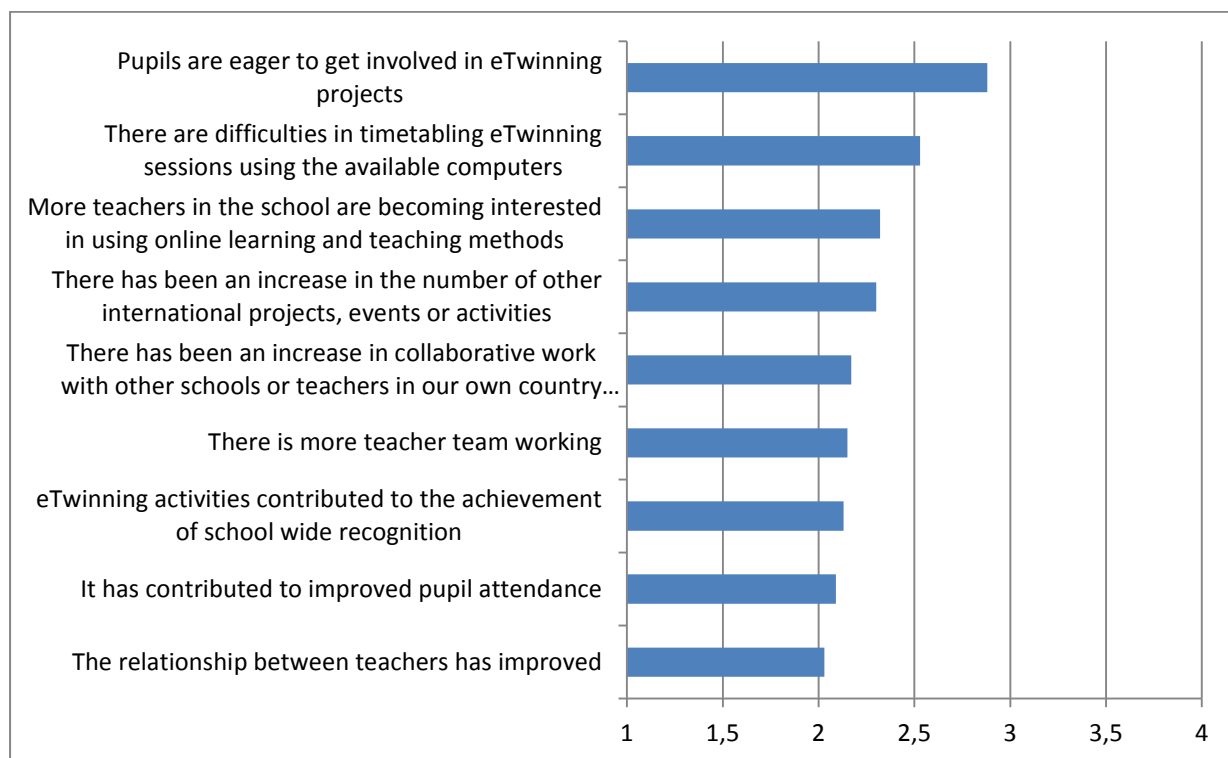
4.4. Impact on participating schools

Broadly speaking the study indicates that if eTwinning is to have an impact on the whole school, it is necessary for the head teacher to be closely involved, if not the driving force behind eTwinning activities or there has to have been engagement in larger international projects involving several classes or even the whole school.

4.4.1. The whole school

eTwinning teachers responding to the survey see the main impact on the school from engagement in eTwinning in the enthusiasm of pupils to become and remain involved in eTwinning projects (Figure 26). Their responses also reflect the difficulties encountered in many schools, and supported in several case studies, in timetabling eTwinning activities within the demands of the curriculum and the limitations of available ICT equipment (see Figure 29).

Figure 26: Teachers' views of impact of eTwinning on schools: mean score 1 no impact at all – 4 significant impact



Just under 40% of respondents to the survey rated eTwinning activities as having 'significant impact' or 'impact' on contributing to school-wide recognition. In a gymnasium in **Lithuania** (Lithuania 2, ages 12-16), success in eTwinning has had a positive impact on the school's identity – it sees itself as the school where eTwinning works, is acknowledged and is supported, and this message is becoming widely known beyond the school community. A gymnasium in a small town in central **Poland** (ages 13-16, Poland 2) is very active in eTwinning: they have completed 18 projects since 2005, covering all age groups, and have achieved three European Quality Labels, and other national awards. These activities are shared with other teachers, pupils, parents, the local government and the mayor of the town. This has resulted in the school being seen as active, modern and friendly, increasing its prestige. Projects that have received awards, in particular, have helped to raise the school's status.

Another benefit for this Polish school has been improved ICT equipment; the purchase of interactive whiteboards came about after the eTwinning teacher was introduced to them in an eTwinning workshop and told the school's head teacher.

4.4.2. Involvement of the school leadership in eTwinning

In a few case studies, eTwinning has been a 'whole school' project and in these cases it is notable that eTwinning is promoted and led by the head teacher. For example, in a primary school in the **UK** (UK England, ages 4-11), the former head teacher introduced eTwinning to the school. She attended a conference in Brussels in 2005 and eTwinning began at the school soon after that. eTwinning is managed by the International Coordinator who ensures classes are aligned in their approach and activities, which they each adapt to their own needs. This has allowed eTwinning to be sustained, even though several key people have recently left the school.

Similarly in a school in Bucharest, **Romania**, (Romania 1, primary and secondary) the school's Director became interested in eTwinning before it was introduced in Romania, wanting to bring a novel experience to pupils. She is the coordinator of the e-Twinning projects, and she has initiated all projects and worked with the whole school, including parents, to achieve a concrete eTwinning plan.

In most cases the driving force behind eTwinning is a language or ICT teacher, supported to a greater or lesser extent by their school leadership. Only 19% of survey respondents overall cited 'lack of school support and recognition' for their work in eTwinning as a disadvantage (see Figure 30).

The case studies reveal the importance of this support, in terms of:

- mainstreaming eTwinning collaboration and extending activities within the school strategy, curriculum and timetabling
- engaging parent/teacher association and the wider community in support of eTwinning
- cross-curricular collaboration in projects

If the head teacher is not directly involved then the impact of eTwinning can remain limited – though there is impact if a project crosses curriculum subjects and teachers collaborate on activities across the school. In the cases where eTwinning is the responsibility of one or two charismatic and dedicated teachers the impact of eTwinning remains with the teachers and pupils directly participating in project activities, without dissemination to other pupils and teachers in other classes or subject areas. A clear example of this is **Cyprus** (aged 15-18) where teachers report that a lack of official recognition within the school contributes to the marginalisation of all projects, including eTwinning. Teachers are not exempt from other duties to accommodate their involvement in projects, except when they accompany pupils on trips, and all eTwinning work is done after school hours. The pupils in this school also noted a feeling of marginalisation, with eTwinning pupils sticking together, and other children not understanding what the projects are about.

This also links to recognition of eTwinning teachers and the levels to which they are supported to carry out these activities (see 4.2.8 and also 4.5.3). Teachers working without support will have limited time and resources to carry out activities effectively.

4.4.3. Collaboration within the school – expanding the reach of eTwinning

As noted above (Figure 18:), 64% of survey respondents said they had involved other teaching colleagues in their school in eTwinning. However, that collaboration within schools tends to be restricted to 'coordination' of teachers by the main eTwinner to participate in pre-determined project activities within their classes, and the transfer of expertise (typically ICT expertise) from eTwinner to other teachers.

When asked to select the main advantages of participation in eTwinning, 19% overall selected a 'better relationship with colleagues in my school', and there is evidence from the case studies to suggest that experienced eTwinners remain rather isolated figures in their schools, while actively collaborating and communicating with teachers in project partner schools and through the eTwinning and other social and professional networking opportunities.

It is not always possible for more teachers to be directly involved in eTwinning projects. In **Germany**, a lower secondary school in a small rural community (Germany 1, ages 14-16) has two teachers currently active in eTwinning plus four more teachers active in Comenius school partnerships, and others active in the school's own exchange programme, meaning that almost a third of the teachers are active in international

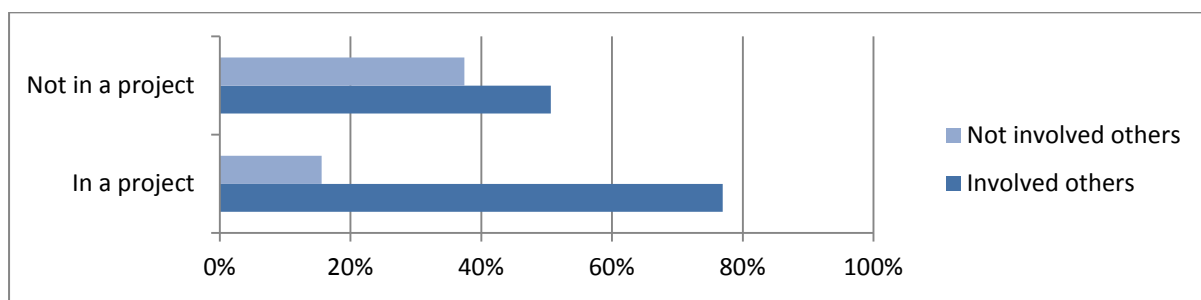
cooperation. Considering this and the fact that many teachers are employed part time, it would be difficult to enlarge the eTwinning group.

Similarly in a primary school in rural **Ireland** (aged 4-12) which has 63 pupils and four teachers, there is one teacher involved in the eTwinning project with a school in France; French is taught in the school but it is kept separate from eTwinning activities. Teachers and the Principal talked about how in such a small school it was important for everyone to have their roles and stick to them in order to get things done - they were too busy to have everyone involved in everything.

However, sharing experiences with colleagues is possible without expanding the project team. In most of the case studies, school colleagues were kept well informed of eTwinning activities through meetings, updates and school displays.

eTwinning projects are the key to collaboration across the school – cross-curricular and in specific activities involving language and literacy, and ICT skills. The survey evidence suggests that eTwinners active in projects are much more likely to involve others in eTwinning activities than those who are registered but not currently involved in a project (Figure 27:).

Figure 27: Teachers currently involved in a project and involvement of other colleagues



The survey respondents indicated (see Figure 29) that perceived as barriers to getting involved included:

- lack of capacity/time to devote to a project (especially among part-time teachers)
- lack of a collaborative culture in the school

To which might be added the following, based on evidence from the case studies:

- lack of confidence in foreign languages
- difficulties in finding project partners

4.4.4. Curricular integration of eTwinning and cross-curricular projects

Curricular integration and project-based approaches

Over 60% of survey respondents did not consider integrating potential eTwinning projects into the curriculum as any kind of barrier in their school. Broadly speaking, it appears that curricular integration of project activities (in some form or another) is the norm, even when project work *per se* is typically assigned to designated free time during the school timetable or part of a flexible time allowance for schools to interpret the curriculum in their own way.

The case studies reveal that integration of eTwinning projects and activities into the school curriculum can be seen as a matter of degree: in some case study schools project work of all kinds is regularly integrated into the timetabled curriculum. For example, in a school in **Austria** (an upper secondary school), all eTwinning activities are integrated into the curriculum and are modularised with several teachers doing smaller sub-projects

put together by the coordinator. In the **UK**, too, (England; a primary school) every class in the school is partnered in eTwinning with a different country, and curriculum links depend largely on the class, the topics they are covering and which country they are partnered with, although most teachers stress that literacy and art are the main curriculum areas covered. Other examples include a geography topic which is based on researching a country with which they are twinned; and links with France which help reinforce and contextualise what is learnt in language lessons. Teachers emphasised that eTwinning has to align with what is already happening in the classroom and integrate into the main curriculum goals. Much of the eTwinning work is about sharing things which the pupils have done in class with their partners in other countries.

In other case studies, allowance is made for a percentage of 'curriculum' time to be used for project-based work; for example, in **Lithuania** (Lithuania 1; a secondary school) a school uses the 10% of the curriculum time that is available for individualised work for activities such as arts activities (video, photography, web page design, performances, etc.), sports activities (athletics), academic activities (languages, mathematics, sciences, etc.) and community work, which may be related to the curriculum in terms of content to a greater or lesser degree.

In some schools, the timetabled curriculum is rather inflexible, for example in **Cyprus** (aged 15-18) where the school takes a fairly traditional approach to the curriculum and there is no time allowance or flexibility in the curriculum for project work. In this case, activities are extra-curricular, so teachers are taking on more responsibilities in their own time and pupils' activities are out of school hours. Similarly in **Poland** (Poland 2, ages 13-16), where there is little support from the school management, the current eTwinning project is run by the librarian with a handful of pupils after lesson time.

Cross-curriculum content

Over 30% of respondents said that their current project or projects are cross-curricular and not restricted to any one subject area. Typically, eTwinning projects might combine elements of language learning and literacy, ICT (as a curriculum subject or skill set), sciences and mathematics (problem-solving) and various social science subjects, such as environmental and nutritional issues. This is also reflected in the case studies: the majority of projects described incorporate elements of two or three curriculum subjects in which foreign languages and/or ICT are usually included. For example, in **Romania** (Romania 2; a secondary school) the last project, which was a joint Comenius school partnership-eTwinning project, focused on building design, but was cross-curricular, incorporating ICT throughout, and covering areas of art, design and technology, economics, environmental education, mathematics / geometry and sciences.

4.4.5. European/international outlook of the school

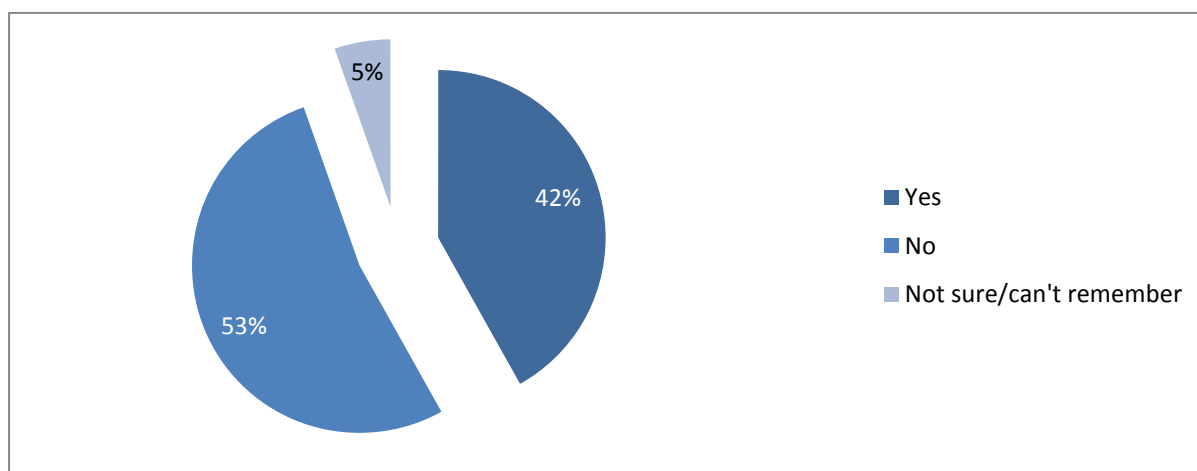
The case studies confirm that eTwinning provides many schools with a relatively easy and cost-effective way of beginning international cooperation work: in most case eTwinning experiences have led to other projects (eTwinning and/or Comenius school partnerships) or a determination to develop a more international outlook within the school.

For example, in **Germany** (Germany 3, lower secondary school), a key outcome of the first eTwinning project was a meeting with pupils from the Italian partner school, thanks to financial support from the city major. Subsequently, the school started a joint Comenius school partnership-eTwinning project involving more partner schools, with this school as the coordinating partner. The driver for getting this joint project was the school's determination to continue international cooperation and exchange work after benefiting from the first project, and recognition of the importance of funding for pupil and staff mobility. A benefit for the school as a result of these projects is a new international aspect to the school development plan, gaining increased acknowledgement

by the parents and community. The school management is now determined to develop a distinct European dimension and to promote trans-national contacts.

Survey respondents also confirm the relationship between eTwinning projects and Comenius school partnerships: Figure 28: shows that 42% of responding teachers' schools became involved in a Comenius school partnership after they began eTwinning.

Figure 28: Schools becoming involved in Comenius school partnerships since starting with eTwinning (% of respondents)



In some cases, however, eTwinning is a welcome alternative to larger international projects, enabling international links without the paperwork and bureaucracy. A primary school in the east of **Italy** (Italy 1, ages 7-15) has experience of eTwinning and Comenius school partnerships, but the eTwinning teacher stated that she initially became involved in eTwinning because it was very quick and easy to join and find partners, and overall, eTwinning is much less complicated and time consuming than other international projects, which always have a lot of documents to complete.

In schools for which eTwinning is the first attempt at international collaboration, or where schools do not have that international element integrated into their outlook, eTwinning tends to be the initiative of one teacher without significant support from others or the school management. In **Ireland** (primary, ages 4-12), where one teacher is conducting eTwinning activities with the older pupils as part of ICT teaching, this is the first time the school has collaborated with a school in another country. There is currently no international policy at school level, with international work in its infancy. The Principal hopes to expand international education in coming years, but expects it will take many years to get fully established and start to benefit the whole school.

In **Poland**, the school (Poland 3, ages 6-12), where participation in eTwinning is voluntary and extra-curricular, does not have any international projects and does not take part in any other European programmes apart from eTwinning, and there are no special policies or plans related to ICT, foreign languages or international exchange. The head teacher encourages the eTwinners but does not see a potential for such international work: she feels it needs active and interested English teachers to be involved, but English teachers are already stretched in school hours and have a lot of after-school commitments (often teaching private English lessons). The eTwinning teachers were not looking to expand into other European programmes, which they see as complicated and bureaucratic.

Those schools where such an international outlook is already established tend to have more projects which include more teachers and pupils, and are more successful, linking

to factors around a whole school approach and the openness of leadership to such projects.

In another school in **Poland**, for example (Poland 2, ages 13-16), an international and European outlook is an important part of the school's mission. The gymnasium school participates in a number of programmes and projects, including ICT national projects, European programmes such as Comenius (including eTwinning) and Youth in Action and other international cooperation projects, and has received recognition and awards for its international work. Languages, ICT and international cooperation are embedded in the school strategy and annual planning. In terms of eTwinning, the school has participated in 18 projects and won three European Quality Labels. The school's openness to international collaborative projects has provided an enabling environment for these projects and the ways in which projects have been carried out.

Similarly in a vocational school in eastern **Romania** (aged 14-18), the school has a strong drive towards European activities: they have achieved the national status of European School, their mission is the creation of European citizens, able to adapt to the labour market, and they are involved in Comenius school partnerships, Grundtvig and Youth in Action. They have been involved in a number of projects with five currently on-going, in which two of the teachers are involved. Interestingly, non-eTwinning teachers say they don't participate because they are busy with other European projects that have more appeal due to advantages such as opportunities to travel.

4.5. Enablers and obstacles to successful participation

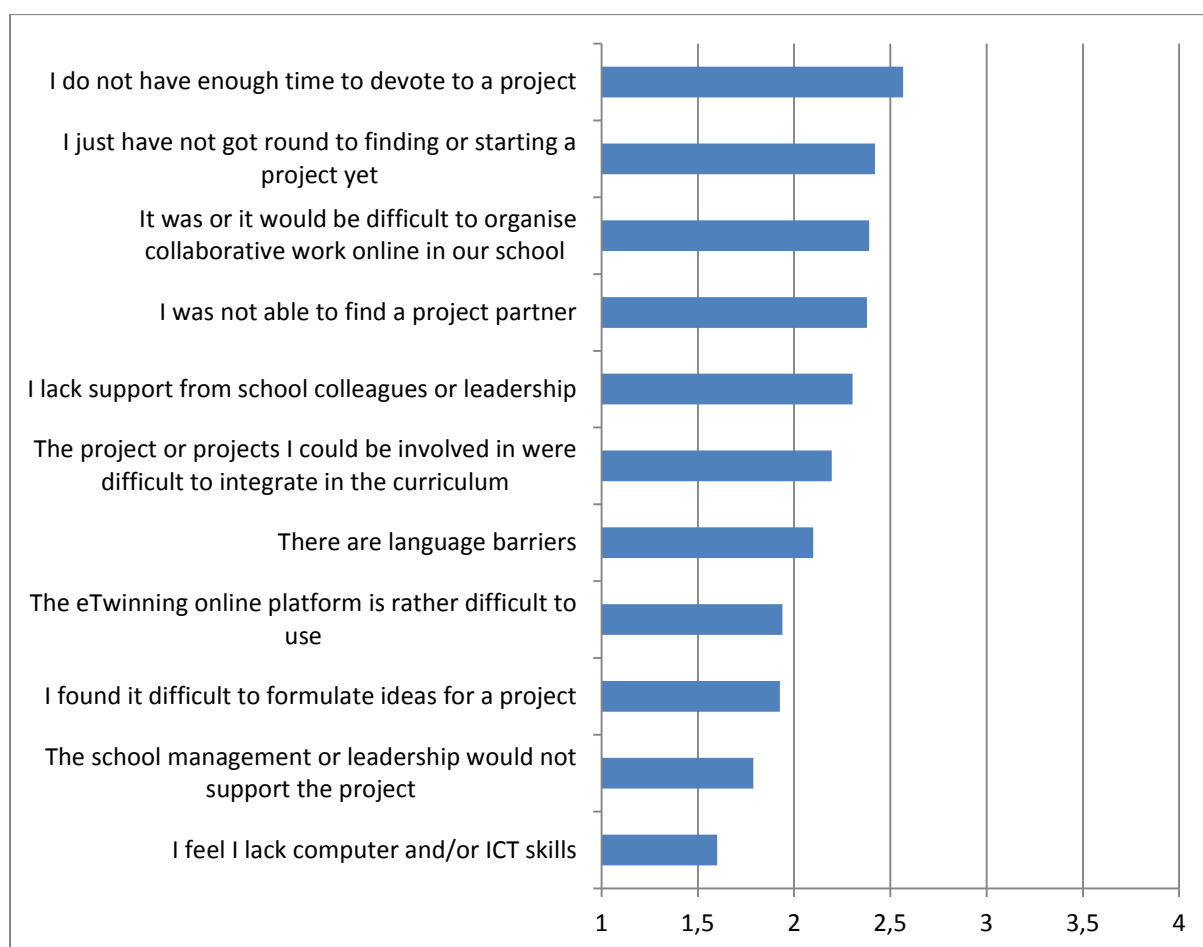
4.5.1. Getting involved in projects

About 44,000 (26%) of the 170,000 registered eTwinning teachers have been or are involved in a project either before or after June 2011.

Given that the principal purpose of eTwinning is to network schools across Europe in collaborative activities, this figure appears to be relatively low as a percentage of the total registered eTwinners. In order to understand better what factors influence teachers' participation or non-participation in projects, survey respondents who were not involved at the time in a project were asked to rank the extent (from 1 – 'not really a barrier' to 4 – a 'significant barrier') to which certain factors were a barrier to their involvement (Figure 29).

Not having enough time emerges as the most significant barrier to involvement in projects; but also the school environment for many teachers may not be conducive – collaborative work online may be too challenging, support from school colleagues may not be forthcoming, or integration of eTwinning projects into curriculum work would be difficult.

Figure 29: Reasons why teachers do not get involved in eTwinning: views from eTwinning teachers currently in a project and those currently not in a project

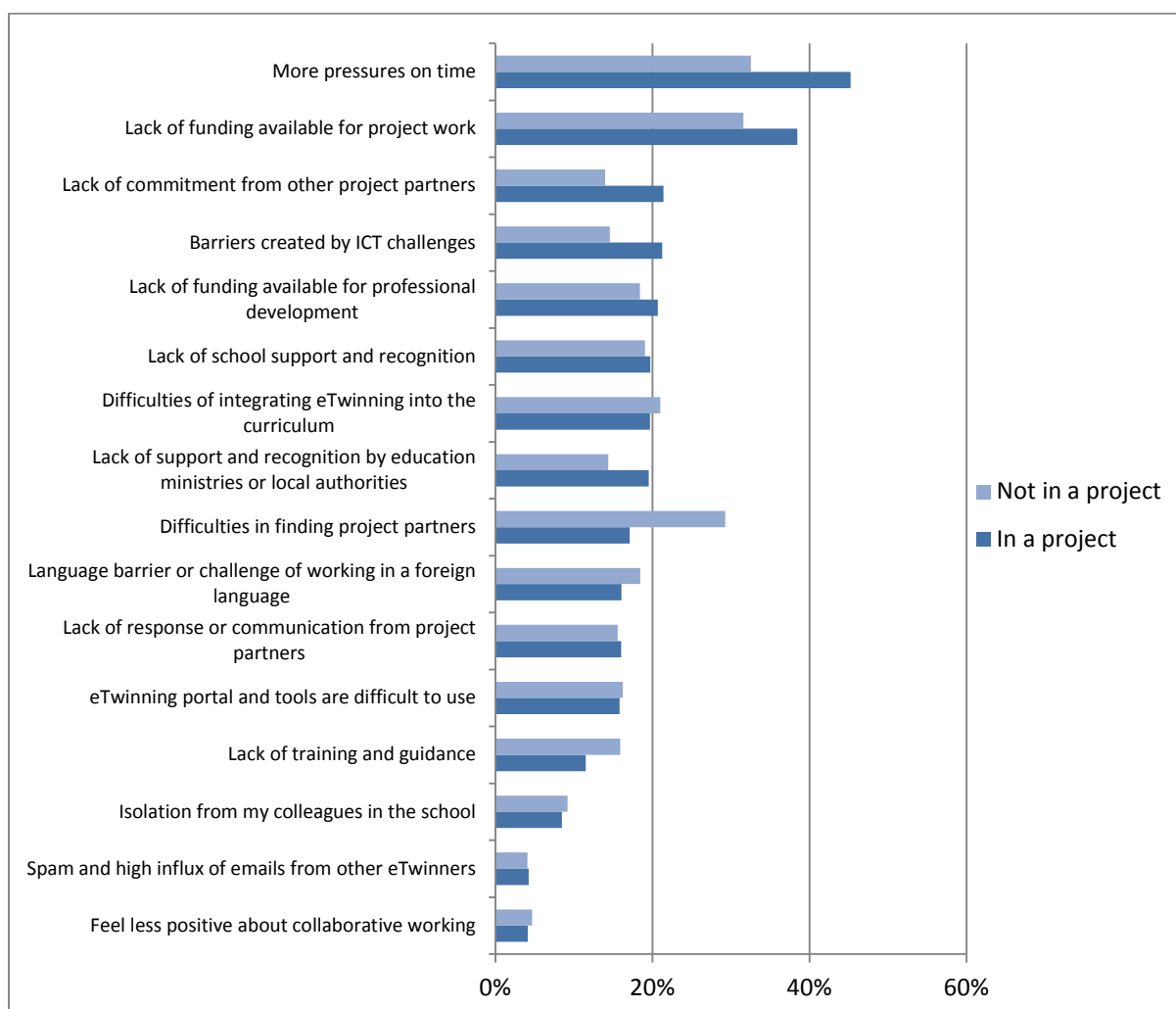


4.5.2. Being involved in eTwinning generally

All respondents were asked about the advantages (see Figure 11) and disadvantages of being involved in eTwinning (Figure 30). It is significant and positive that fewer survey respondents identified disadvantages than advantages.

Similar themes emerged as challenges: time, difficulties in finding project partners and ICT are prominent, and were evident also in the case studies. These areas are explored in more depth below.

Figure 30: Disadvantages of being involved in eTwinning: views from eTwinning teachers currently in a project and those currently not in a project



4.5.3. Time and appreciation for their efforts

The main challenge for all eTwinning staff is the extra time and energy needed to invest in the projects, resource expenditure for which the school does not generally compensate eTwinners. Teachers have to use a lot of their own time to do any project work (including eTwinning), and this was frequently cited by case study teachers. In a vocational island school in **Italy** (Italy 2, ages 15-18), the main motivation for the teacher to join eTwinning was to exchange experiences and feel less isolated. This motivation is what allows eTwinning to continue – their enthusiasm and willingness to work in their free time – against challenges of a lack of time and lack of financial incentives.

In addition, the work required to familiarise themselves with a new system, devise a concept and find appropriate and willing project partners might explain why many simply 'have not got around to starting a project yet' (see Figure 29).

In the **UK** (Northern Ireland, ages 3-20), the eTwinning platform was used as a communication tool for a Comenius school partnership, and engagement was initiated by the Principal. When facing the initial challenges in getting eTwinning off the ground, teachers felt they did not have the time – or the inclination – to explore the site and teach themselves how to use it.

In some schools, the time commitment required for international work is recognised and additional support is provided. In another **Italian** school, an elementary and nursery school based in Rome (Italy 3, 9-11 years old), a small number of working hours are made available for eTwinning, but in order to go to the conferences and events on eTwinning they need to take annual leave. Nationally, eTwinning projects are not recognised and teachers do not get extra credit for their work.

Small financial rewards recognise the extra commitment of teachers in some schools. In **Finland**, at a school in Lapland with an increasing focus on international cooperation, the teachers have freedom to plan and organise project work, and they are paid one extra hour per week in salary for project work. In all three of the **Polish** schools, eTwinning teachers received small bonuses from the head teacher, though a nominal amount. In the primary school in particular (Poland 1, ages 6-13), the teachers reported professional development benefits, both in terms of their satisfaction and widening horizons, and because eTwinning contributes towards nominations for the next grade in a teacher's professional career. Teachers feel they are appreciated and supported by the head teacher, who often congratulates them and mentions the projects to other teachers and at parent council meetings, as well as giving a small motivational bonus and annual reward to those participating.

In most of the other case studies, eTwinning attracts no special recognition, reward or status for teachers – usually because this extra work is often not recognised at national or school level, or because it is embedded into their normal lesson time and planning. Status and recognition is further explored in 4.2.8 and 4.5.7.

4.5.4. Finding appropriate and dedicated project partners

Finding project partners in the first place is a challenge for eTwinning teachers, especially those new to eTwinning who have not yet built up contacts: 48% of respondents not in a project cited this as a significant barrier or a barrier to getting started (Figure 29). Partner finding forums on the eTwinning platform are considered difficult to use (because of the many messages and difficulty in searching) and frequently case study teachers complained of a lack of response from eTwinners who have registered on the forums and never come back, or who agree to collaborate but do not follow through.

In the **UK** (England, primary, age 4-11), some classes have partnerships that have been established between teachers over several years, and there is a strong working relationship, with two-way and regular communication. Finding new partners, which is the responsibility of the International Coordinator, is challenging: two of the classes had not been able to find partners this year due to a lack of suitable responses to requests on the platform. Both teachers and pupils at this school talked about the frustrations of partnerships that did not work out, owing mostly to non-responsiveness, different priorities or different school timetables.

As a teachers in a primary school in northern **Sweden** (ages 7-16) remarked, when partners quit or do not respond during a project, there is nothing the teachers can do about it and it can be devastating for pupils engaged in a project. Projects at the

Swedish schools have succeeded because of the sustained engagement and enthusiasm of project partners, and particularly the lead partner.

4.5.5. Professional development opportunities and support

Participation in eTwinning professional development workshops, national meetings and online events has an obvious impact on the motivation and enthusiasm of eTwinning teachers, and on their teaching methods, and the ways in which projects are carried out.

For example, for teachers at a gymnasium in **Lithuania** (Lithuania 1, ages 16-20), eTwinning has provided many opportunities for professional development. Two of the main eTwinners are very active nationally and internationally, participating in seminars that the NSS organises, supporting teachers from other schools and encouraging other teachers in their schools to attend national seminars. Several professional meetings and seminars have been held at the school. Similarly in **Italy** (Italy 2, aged 15-18), eTwinning teachers regularly attend eTwinning conferences as well as the national meetings. One of the eTwinning teachers is an eTwinning ambassador and she is an important source of help for potential eTwinners in the whole region.

4.5.6. Technology and the capacity to use it

Good ICT infrastructure within the school (with robust broadband connection) is a key enabler of eTwinning in schools. Without it, teachers can struggle (while often also lacking adequate experience to be very effective) to make use of the eTwinning platform and other ICT tools in interactive and innovative ways.

At a lower secondary school in a rural area of **Germany** (Germany 1, ages 14-15) participation is constrained mainly by ICT in this school: access to the computer laboratory is limited and broadband speeds (taking into account security settings set by the eTwinning platform) can be slow. The lack of laptops and internet connectivity in classrooms does not allow a different or more flexible approach or the integration of eTwinning into other lessons. For the active eTwinning teachers, who have no ICT training, continuous experimentation with new ICT and web-based applications and tools is also challenging and time consuming.

Even where ICT infrastructure is strong in one school, it may not be in their partners – resulting in similar constraints on what they are able to do. The higher technical school in **Austria** (ages 16-19) has a specialist focus on ICT, and has very high standards of infrastructure as a result. However, they have often found problems with the Eastern European project partners' ICT infrastructure where uploading materials has taken a long time and was unreliable, and too many site features could undermine performance.

The challenges for both teachers and pupils associated with using the eTwinning platform is a constant thread in the case studies. In **Belgium** (ages 14-18) pupils found the Twinspace somewhat cumbersome and less attractive than other means, and that can affect their motivation – but school policy restricts the use of Facebook and some other social networking tools. Pupils in **Cyprus** (ages 15-18) also feel that they need a different forum, space or site to communicate and post more freely and prefer using YouTube and Facebook instead. Several case studies also mentioned that the Twinspace was not attractive or user-friendly for younger users or those of lower abilities.

These challenges also link to the constraint around time and capacity, for both teachers and pupils: finding time to get online in class in the small window of time allowed in the timetable, and then struggling to make the Twinspace work is the experience in a number of case study schools. At a school in the **UK** (Scotland, ages 4-11) with a Comenius school partnership project, it was hoped that direct dialogue through the Twinspace would be less frustrating than waiting months for letters from pen-pals. However, there were a lot of technical problems with pupils' passwords and log-ins

eating into the limited time in the ICT lesson, or resulting in pupils unable to log in at all. Often teachers found they had continually to call on the head teacher to help get the pupils online – a huge burden in every ICT lesson. Though able to do some activities on the Twinspace, pupils were not able to use instant messaging to talk to their pen-pals directly, which they had hoped to do.

4.5.7. National status and recognition for teachers and schools

Overall eTwinning activities appear to be quite poorly integrated into national systems of accreditation and reward for innovation or professional development. The lack of recognition of their efforts is very de-motivating for schools, and most individual teachers are not given incentives to participate in eTwinning actively, either at school level or through the national system (see 4.2.8 and 4.5.3).

Most National Support Services (NSSs) are keenly aware of this constraint on participation and, among other factors, some NSS staff cite the lack of clearly defined pedagogical aims, objectives and project outcomes that would have value and meaning within the terms of the national systems as a contributing factor. At the same time, the NSS staff would be reluctant to see the open, non-bureaucratic and non-threatening nature of eTwinning changed by the introduction of predefined procedures and restrictions on freedom and creativity: one member of NSS staff described eTwinning as "sweet subversion – it allows teachers to be creative outside of very fixed structures, therefore attracts the most creative teachers".

The issues of status and recognition, at least at a national level, are closely allied to the setting of some standards or measures by which eTwinning projects and progress could be assessed. At present this assessment at national level, both for project approvals and in monitoring of project progress, appears to be a fairly arbitrary affair in many countries, understandably lacking any strong credibility with education authorities at a national level.

In a brief survey, NSS staff members⁵³ were asked to comment on whether or not greater assistance and tools should be provided to address these issues. Of the 34 responses (from anonymous individual staff members), a majority (23) strongly agreed or agreed with the need for 'set criteria by which proposed eTwinning projects can be approved or not at national level'; 29 strongly agreed or agreed with the need for some assistance to 'help you and schools to assess progress in individual projects and across all eTwinning projects in your country'; and 30 strongly agreed or agreed with the need for tools to 'measure the impact overall of eTwinning in their countries in ways which would support the case for greater recognition by national authorities of eTwinning projects and experience as positive achievements by teachers and schools'.

The respondents were split almost 50/50 on whether or not such tools should be 'uniform across eTwinning and produce comparable results whatever the country', or 'easily adapted to meet the needs of different countries and assessment systems'. They were also fairly evenly split between such tools being 'voluntary – that is, schools can use them if they feel it helps them or if they would like a way to assess their own progress in a project' and 'voluntary, but with some kind of incentive attached, so that those teachers/schools that do use them get rewarded in some way'.

⁵³ All responding anonymously

5. Conclusions

5.1. Who is benefiting from participation in eTwinning and how?

5.1.1. The impact of participation on teachers and pupils in projects

Teachers have been the major targets and the main beneficiaries of eTwinning to date, more so than the large number of pupils likely to have participated in one way or another in eTwinning project activities. Pupils have not so far been targeted directly in order to comply with national pupil safety standards and because it is presumed they will be reached effectively through the teachers.

“2011 was seen by both the Central Support Service (CSS) and the various National Support Services (NSS) as a year of the consolidation for eTwinning as an action that not only promotes project work between teachers but provides them with the tools, social networking resources and professional development opportunities in order to do it more effectively.”⁵⁴

Involvement in eTwinning projects is the only way that significant impact and benefit is felt by pupils and, to a large extent, by teachers.

Broadly speaking, participation by eTwinning teachers in projects has opened doors and decreased their sense of professional isolation, contributed to changes in the way they teach and (with other project work) enabled them to develop a different relationship with participating pupils. How far these changes have impacted upon their other, non-eTwinning work as a teacher it is not possible to say, and all these benefits are tempered by the extent to which it is possible for them to integrate eTwinning (and other project) work into mainstream curriculum activities and timetables, as well as by the each school's available ICT capability and infrastructure.

Evidence from the case studies confirms that pupil participation in eTwinning projects has had impact on various aspects of pupils' attitudes towards learning, towards their peers and in their motivation, particularly in building confidence and self-esteem and particularly in language and communication. Unless the school has multiple eTwinning projects going on at different levels and/or engages in active cross-curricular approaches to project work, these impacts are usually focused around a particular grade, class, subject or teacher. This is because eTwinning is typically driven by one or two enthusiastic and dedicated teachers and collaboration across the school is generally still quite weak, though the CSS has recently been trying to address through the promoting eTwinning School Teams.

There is also clear evidence of changed attitudes among pupils to subjects and greater motivation for learning, a sense of fun and enjoyment in eTwinning activities, increased confidence and improved skills through greater autonomy and decision-making in their project groups. How far the skills and attitudes gained by pupils have been transferred to other areas (e.g. other projects, other subjects) is not clear since eTwinning schools rarely collect evidence or monitor this. One or two case studies suggest that these gains are not context dependent and that eTwinning participation may have had lasting impact in some subject areas. All pupils consulted in the case studies appeared to be interested in continuing with eTwinning activities.

⁵⁴ From eTwinning 2011 Annual report: Executive Summary

5.1.2. Wider collaboration within schools

The case studies suggest that eTwinning has the potential to become a significant driver of collaboration within and across schools (i.e. between teaching colleagues and pupils of different streams and in different subject classes). However, there are various existing and potential barriers to such collaboration, relating more to the school structure and management itself than to anything that eTwinning might affect (including lack of time and support for teachers to develop eTwinning activities, and to engage in professional development opportunities and share experiences, etc.).

Where the school has an active history of involvement in multiple eTwinning projects, covering several different pupil grades and subjects and with good curricular integration, eTwinning can have a significant impact on the whole school. Nonetheless, the impetus and driving force behind all this activity may still come from just one or two active and dedicated teachers.

5.1.3. Professional development and networking

All case studies report direct or indirect benefits in the area of professional development (interpreted in the broadest sense) for participating teachers (self-confidence, motivation, ICT and language skills, project management, getting to know other teaching and learning approaches, etc.). Take-up and enthusiasm are high for eTwinning professional development workshops and other online and face-to-face events organised either by the CSS or NSS, and participation obviously has clear benefits for participants, though these are necessarily limited in number. There are also positive effects of such events for spreading the word and encouraging the expansion teacher registration in eTwinning.

Evidence from the survey tells us that eTwinners involved in projects, as well as those who are not, recognise the potential benefits of networking through eTwinning, offering them opportunities to develop ideas through dialogue with other teachers, to feel less isolated and share problems and issues not necessarily associated with eTwinning with other teachers.

5.1.4. Social networking and professional development

eTwinning is at the forefront in using social networking to contribute to informal professional development through exchange of views and dialogue between teachers. Currently only a small proportion of registered eTwinners joins and actively contributes to the Groups and Teachers' Rooms, although communication between teachers is going on through one-to-one internal messaging, in the journal section of teachers' profile, inside projects and in Facebook groups created by eTwinning teachers.

Many teachers in the case study schools did not recognise the use of social networking, blogs and chat rooms and discussion forums as professional development. Those that did see the potential for such online networking were not doing it themselves. It is important to identify the reasons for this lack of take-up. We can speculate that time to engage is obviously a major constraint for most teachers, and that any activity that does not have immediate benefits in the classroom will not be prioritised.

Analysis of the types and qualities of interactions on eTwinning Groups and Teachers' Rooms has allowed some conclusions about the networking, learning and professional development gains of active participants. With a high proportion of interactions in both Groups and Teachers' Rooms unrelated to eTwinning projects or teaching methods in general, and little evidence of discussion that develops and builds on shared ideas, these gains currently appear to be limited. This supports the view that these tools may require more structure, leadership and pedagogical direction to be of real value. It is also difficult for teachers to navigate through or search current forums to find material of real interest or to see what is new.

5.2. What is the nature and extent of any change in local conditions because of participation in eTwinning?

5.2.1. School commitment to international collaborative projects

eTwinning is an accessible way for a school or a teacher to get involved in international collaborative projects, often for the first time. Perhaps the biggest local change effected by participation in eTwinning, for many schools, is the establishment of a precedent for international collaboration projects within the school.

Various elements of eTwinning (established contacts in other European schools, experience of project management, use of foreign languages to communicate) can lead directly to the school's involvement in larger and more complex projects, either within eTwinning or as part of other initiatives. The case study schools that have made this journey regard it as scaling up, particularly where it has allowed them to go from only online interaction to some form of physical exchange (even where it is only the teachers or a small number of pupils). Funded exchanges and face-to-face meetings for pupils and teachers are clearly more highly motivating. However, eTwinning is rarely abandoned as a result of engaging in, for example, Comenius school partnerships, but provides added value through effective partner finding, background work and an online channel for one seamless project.

This synergy between eTwinning projects and Comenius school partnerships is very positive: making European school collaboration possible for all schools and offering free tools for partner finding and day-to-day collaboration and project work to the Comenius school partnerships means eTwinning is having an important impact in this area.

5.2.2. Engaging with the school's wider community

Successfully engaging in eTwinning projects and collaborative activities (and particularly being awarded a Quality Label) can significantly contribute to raising the profile of the school within the local community and/or with national and local authorities.

Engagement with a school's wider community through, for example, eTwinning project activities like taking pupils out into the community for research, the inclusion of roles for parents and channels for them to see the results of projects, not only raises the profile of the school but can offer the potential of raising financial and other support to the school to increase its international cooperation activities. Engaging parents and wider community organisations can also contribute positively to the spread of European competences (knowledge and understanding of the European Union and other cultures, intercultural dialogue etc.).

5.2.3. Status and recognition at national levels

One area of change in local conditions remains intractable to eTwinning in many countries, and that is the achievement of recognition and status for eTwinning in national educational systems. Such recognition could unlock a range of benefits for eTwinning teachers (greater appreciation and professional development gains, more support from their school managers, etc.). Though there is evidence of national support in some countries, lack of official status for the Action in most countries constrains commitment to eTwinning by school head teachers and does little to incentivise participation by teachers.

5.3. What difference has eTwinning made?

5.3.1. European collaboration made possible

There are no international comparators against which eTwinning might be benchmarked: it is, without doubt, the largest, most diverse and most international school and teacher online network, and as such can only be judged on its own merits.

As an action of the Comenius sub-programme, the reach (in terms of numbers of schools, teachers and pupils that participate or have participated) is greater than other interventions. Higher numbers of engaged teachers have positive implications for sustainability and value for money, although it is arguable from the case studies that its impact on participants could be rather shallow and transitory. For the dedicated and highly active teachers, including eTwinning Ambassadors, eTwinning and the fact of school and teacher collaboration across Europe has been professionally (and personally) transformative, and this motivates them to continue their involvement despite the lack of financial incentive.

In some respects, eTwinning exists primarily as a set of tools to facilitate collaborative learning projects, wherever the schools may be located, and there are plenty of other, similar (often better) tools available commercially and *gratis* on the internet. The added value of eTwinning concerns international, European collaboration and the potential to develop the sense of a multi-cultural 'community' of schools and teachers. Working collaboratively with a foreign school and teachers has greater impact than doing a collaborative project with a school down the road (which very few of the case study schools ever do). The main reasons can be summarised as:

- Pupils learn to look beyond their own borders and acquire knowledge and understanding of other countries in an authentic way;
- Language skills are required and improved through 'real' encounters;
- The international connection is a motivating factor that brings prestige and support from school management and parents, particularly for small, disadvantaged or isolated schools;
- Teachers feel less isolated through contact with foreign teachers who nonetheless share similar challenges and problems.

5.3.2. ICT approaches and use

eTwinning is clear about the "transformative potential of ICT for innovative and effective teaching and learning approaches with the potential to equip both teachers and learners with new skills for jobs and lifelong learning"⁵⁵, and there is no doubt that improvement in ICT skills and confidence among teachers (especially) and pupils are recognised and ubiquitous benefits of participation.

Many of the teachers in the case studies reportedly began eTwinning lacking confidence in their ICT skills and struggled to develop these. It seems reasonable to assume that, without the inspiration, incentives and support offered through eTwinning, they would have been unlikely to have made similar progress.

Pupils themselves rate ICT skills acquisition rather less highly among the benefits of eTwinning, and it is fair to assume that their exposure to the relatively and increasingly common internet tools and resources would have happened anyway in time, though

⁵⁵ Tellnet (2011) Teachers' Lifelong Learning Network: Progress Report (Public Part). Education, Audiovisual & Culture Executive Agency.

eTwinning perhaps provides an educational context in which to develop and use these skills.

ICT approaches and use are, of course, subject to wide variations and often limitations in national and local ICT infrastructure provision, as well as lack of adequate equipment in the schools or partner schools. Such constraints underpin the very high use of offline and non-computer based activities and methods for communication and project work: evidence from the survey and case studies suggests email is mainly used in exchanges, and that pupils rarely work synchronously on computers even where ICT infrastructure and provision is good.

The current eTwinning portal and tools are also regarded in most of the case study schools as a constraint on successful participation in eTwinning.

5.3.3. Pedagogical value and impact of projects

eTwinning is seen by many head teachers and teachers in the case studies as a way of introducing innovation and changes in teaching methodologies into the school and curriculum – the project approach with the added value of international collaboration.

One of the problems of trying to assess the impact of eTwinning on teaching methodologies and approaches is that teachers and schools are only required to set the most general and non-specific pedagogical objectives for their eTwinning projects. Project preparation includes no baseline assessment of skills or attitudes among pupils, for example, which would allow change /improvements to be observed or measured. Without clear and measurable (albeit simple) objectives, definitive statements about impact cannot be supported by firm evidence. The question may legitimately be posed: should the open, informal and non-challenging nature of eTwinning be changed in order to facilitate assessment of its pedagogical value and impact?

Non-definitive, anecdotal evidence (based on individual opinions and recollections) from all the case studies suggests that positive pedagogical change does take place in a successful eTwinning project; this is mostly associated with:

- new and interesting relationships between teacher and pupils
- attitudes towards and motivation for learning
- skills and competence gains (including ICT)
- European competences and an international dimension in particular

Some of these are changes associated with almost any 'project approach' to teaching and learning (typically involving the pupils in team work, independent research and decision-making). There is evidence to suggest that where schools already 'do' projects (whether integrated into the curriculum or separate), eTwinning does not necessarily have a significant impact upon teaching methodology, apart, perhaps, for the more intensive use of ICT as a tool to facilitate project-based learning within some classes.

At an individual level, there is plenty of evidence to suggest that eTwinning teachers, through collaboration and access to eTwinning professional development inputs, learn about and adopt new teaching methodologies. Their experience and new knowledge, however, is rarely transferred through extensive in-school collaboration and school-wide projects. This has been recognised by the management of eTwinning, and the promotion of eTwinning School Teams is an encouraging step towards addressing the issue.

6. Recommendations

The purpose of eTwinning is to mainstream school networking and to make it possible for all schools to participate in European, school collaboration activities; in this mainstreaming, significant success is evident. While endorsing the positive aspects of engagement in eTwinning by more schools and teachers, the recommendations of this impact study are directed mainly towards improving the experience of eTwinning for participating pupils, teachers and schools, and not towards strategies for expanding the existing reach and scale of the Action.

6.1. Focus on quality in the eTwinning experience

The eTwinning Action, after six years of promotion and consolidation, is well-established and now includes a substantial and growing number of registered teachers. Given the limitations on resources, particularly for some National Support Services (NSSs), **we recommend** that the priority for the next phase should be to focus on the quality of the eTwinning teacher's experience, without impeding the further expansion of numbers of registered teachers.

We recommend that the main thrust of this refocusing should be to get more registered eTwinners to initiate and participate in school projects, because we know that teachers in projects are more active overall as eTwinners, that participation in projects provides a richer and more professionally rewarding experience for teachers and is the only way in which eTwinning can directly impact on pupils. How this is done will vary from country to country and no doubt involve repeating, and perhaps intensifying, tactics and initiatives that have been used before.

For example, the Central Support Service (CSS) could expand the range of project kits, promote and incentivise their use more actively. Working together, the CSS and NSSs could identify those factors – at programme and country level – that constrain project involvement by eTwinners and address those that lie within their power to do so. This could mean that NSSs, instead of running workshops to promote general engagement in eTwinning, focus on expanding support to eTwinners to help them develop project ideas, through targeted workshops, mentoring by more experienced eTwinners or online training packages (the Polish case studies provide a good example here).

We also recommend that the use of the social networking tools and forums on the eTwinning platform should have greater pedagogical relevance and better professional development outcomes for eTwinners. This could be achieved, for example, through: better and more mediation and facilitation of content by teachers with real expertise; improved functionality of the Groups and Teachers' Rooms so that participating teachers can search the content and keep up-to-date more easily; more intervention and direct guidance on the forums by CSS pedagogical advisers and experts.

6.2. Set more challenging expectations

The low threshold for participation encourages engagement from all levels and abilities and should continue to be promoted by the Action. However, this low threshold for entry is not to be confused with low quality: small scale or simple projects can and should have positive learning outcomes. **We recommend** a move to set higher pedagogical expectations for eTwinning overall and for projects in particular.

In part this would mean improving the quality of learning content in new projects by setting some explicit targets and standards (e.g. examples of best project content and outcomes) that could guide teachers and schools in different countries. **We recommend** the reinstatement and strengthening of the CSS's Pedagogical Advisory Group (PAG) as a critical step in this, providing stronger pedagogical advice and

guidance and assisting the NSSs in interpreting such advice and guidance to suit local circumstances and policy priorities.

We also recommend that improving the retention of experienced eTwinners will also contribute to meeting higher and more challenging expectations, and suggest that the CSS and NSSs try to identify ways in which their experience can be harnessed more effectively within schools and at programme level.

Three possible areas emerge from this study where changes might contribute to the retention of experienced eTwinners and dissemination of their experience:

- Improve the user-friendliness of the current eTwinning platform tools for collaboration;
- Improve mediation and management of the social networking forums;
- Provide more opportunities for less experienced eTwinners to access pedagogical guidance and professional development training.

6.3. Introduce learning outcomes frameworks for projects

As part of the move towards higher pedagogical expectations for eTwinning, and as a way to address the critical issue of lack of status and recognition of eTwinning within most national systems, **we recommend** the development of one or more learning outcomes and/or competence frameworks for eTwinning, either based on or drawing from pre-existing frameworks (e.g. the European Learning Outcomes (Elos)⁵⁶, national learning frameworks for curriculum areas, learning frameworks targeted at informal and lifelong learning outside of a school setting⁵⁷) or developed specifically for eTwinning.

In this area, the contributions of a re-invigorated Pedagogical Advisory Group would be critical in overseeing discussion and informed debate among NSSs and other stakeholders. Key questions for consideration would include: whether one framework could be used effectively across all projects and pupil age groups; whether such a framework should be uniform across eTwinning and produce comparable results whatever the country, or be easily adaptable to meet the needs of different countries and assessment systems; whether the use of a framework in the development of project proposals should be voluntary, and how to incentivise teachers to use them in developing project proposals; and whether cumulative impact should be encouraged and measured.

Such a framework or frameworks would:

- Set standards or criteria by which proposed eTwinning projects can be approved or not at national level. We recognise that this would raise the project selection bar from the current situation in which more or less all projects get approved; this is part of setting more challenging expectations;
- Assist NSSs and schools to assess and monitor progress in individual projects and across all eTwinning projects in the country; this is something that NSSs would evidently welcome;
- Enable the measurement of the impact overall of eTwinning in individual countries in ways that would support the case for greater recognition by

⁵⁶ <http://www.europeesplatform.nl/sf.mcgi?4276>

⁵⁷ For example, Inspiring Learning for All
<http://www.inspiringlearningforall.gov.uk/toolstemplates/genericlearning/index.html>

national authorities of eTwinning projects and experience as positive achievements by teachers and schools.

We also recognise and take into account in these recommendations the implicit risk that eTwinning might lose some of its open, inclusive, non-bureaucratic and non-threatening character; and that without the provision of project funding teachers may be unwilling to engage with a more rigorous and openly evaluated programme. However, such a tool can be designed to support rather than police teachers, and we believe the gains would outweigh any negative consequences arising from these changes.

6.4. Impact on the whole school

It is arguable whether there can really be said to be impact from eTwinning on the school if only one class in one year is engaged; certainly, that impact could not be said to be sustainable or scalable. **We recommend** that efforts are directed at embedding eTwinning more effectively into the school for sustainable and school-wide impact. The CSS addressed this issue in the eTwinning School Teams campaign in spring 2012 in which the main approach was to promote teams as a good idea and asking people to post messages about their experience. **We recommend** the following approaches also be considered:

- Acknowledge and celebrate synergy with Comenius school partnership projects (for example, highlighting examples of joint projects on the eTwinning platform);
- Promote and provide guidance to schools on getting 'cumulative impact' from successive eTwinning projects, through increasing the scale of projects (involving more pupils and subjects though not necessarily more partners) and /or building successive projects around a more strategic plan for the school or a particular curriculum area. In this the leadership of the head teacher will be a critical factor;
- Promote eTwinning and these 'cumulative' approaches directly to head teachers and Principals and encourage NSSs to work directly with them (through meetings, workshops etc) to identify effective strategies for eTwinning in their school;
- Encourage a greater focus on learning outcomes so that incentives, status and recognition are facilitated;
- Ensure better retention and engagement of eTwinners within the school and help head teachers to use experienced eTwinners more constructively.

6.5. Focus on the pupil

For legitimate reasons, recognised by this impact study, eTwinning has been more teacher-focused than pupil focused to date, and the impact on the relatively few pupils engaged in eTwinning in each school has been significant but restricted in its nature. There is now a need to re-focus the eTwinning Action and put the pupil at the centre of planning and pedagogical discussions, without risking the contravention of any national norms or embargoes. Improving project quality and the use of learning outcomes frameworks will have a positive impact on the pupils' experience of eTwinning. **We also recommend** that consideration should be given to:

- Providing more and better guidance for teachers on how to engage and empower pupils since levels of empowerment and autonomy are associated with positive outcomes for pupils from projects. We recognise the concerns in several countries about allowing pupil-to-pupil communication, unmediated by the teachers, and unmediated access to the internet, and that this can

constrain pupil autonomy and independent, collaborative work, and sap the confidence of teachers. However, there are successful examples from which to learn lessons and with improved functionality in the Twinspace, empowering pupils could become a priority focus for the CSS and NSSs in guidance and training interventions;

- Engaging pupils in the development and improvement of the eTwinning platform and tools. The CSS might collaborate with NSSs and eTwinning teachers to: distribute a needs and preferences survey direct to pupils; include pupils in usability tests for new tools; invite eTwinning pupils to represent their peers on user groups and focus groups in order to find out more about their perceptions of eTwinning and its impact.

Glossary of eTwinning terms

This glossary is taken from the eTwinning cookbook 2011: http://files.eun.org/corporate/Glossary/EN_glossary.pdf and contains terms used in this report or annex.

eTwinning Ambassadors	Experienced eTwinners working at local and national level to support other teachers and promote eTwinning. Ambassadors are appointed by their NSS and are there to support eTwinners along the way.
Central Support Service (CSS)	The European eTwinning office, run by European Schoolnet in Brussels. The CSS is responsible for the central coordination of eTwinning activities across Europe.
Comenius Partnerships	Comenius Partnerships is another action within the overall Comenius programme that provides a set number of grants per year to collaborative projects. An eTwinning project can also be at the same time a Comenius Partnership.
Conference (eTwinning)	The annual eTwinning Conference is a three-day event that brings together over 500 participants (teachers, head teachers, NSS and stakeholders) to discuss eTwinning and celebrate success during the eTwinning Prizes awards ceremony.
Desktop (eTwinning)	The eTwinning Desktop is the social networking area restricted to eTwinning registered teachers (pupils do not have access). Functionalities include: profile creation, networking and partner-finding tools, and resource sharing.
eTwinner	A teacher involved in eTwinning and registered on the eTwinning Portal.
eTwinning	A European action that promotes school collaboration and networking through the use of ICT between schools in Europe.
European Quality Label (eTwinning)	Recognition at European level of innovation and success in an eTwinning project. If at least two partners in a project have received a National Quality Label, these same project partners are then awarded the European Quality Label by the CSS. The European Quality Label is awarded automatically, once a year (usually in September) and is a prerequisite for participation in the annual eTwinning Prizes competition.
European Schoolnet	The coordinating body of eTwinning at European level, on behalf of the European Commission. European Schoolnet manages the Central Support Service (CSS) for eTwinning.
Groups (eTwinning)	Communities within eTwinning for teachers to discuss by subject, theme or topic. Groups allow the sharing of ideas and connecting with like-minded eTwinners.
Guidelines (eTwinning)	As PDF documents on the eTwinning Portal, eTwinning Guidelines explain in detail how to use eTwinning both in terms of its Portal tools (Desktop and TwinSpace) and its pedagogical value.
Kits (eTwinning)	Step-by-step guides to successful projects with concrete ideas for teachers on how to implement a European collaborative project in their class. Kits can be used in their entirety or adapted to specific teaching contexts.
Learning Events (eTwinning)	Short intensive online events on a number of themes that offer an introduction to a topic, stimulate ideas and help to develop skills. They do not require a long-term commitment (discussion, reflection and personal work spread over ten days) and are run by education experts.
Learning Lab (eTwinning)	A special platform developed for eTwinning Learning Events. If you participate in a Learning Event, the event's activities will take place here.
Login (eTwinning)	To access the eTwinning Desktop, Project Diary and TwinSpace, teachers must be registered. In order to log in, one must have a username and password, which is set up when registering. For the TwinSpace, pupils receive a login from their teachers.
Mailbox (eTwinning)	An internal messaging system that allows safe exchange of messages with other schools registered on the eTwinning Portal. The mailbox is a tool in both the Desktop (for teachers) and the TwinSpace (for pupils as well as teachers in the project).

Modules (eTwinning)	Short activities that can be incorporated in any type of eTwinning project, no matter what the subject. Modules are a great way to kick off a project, provide something different midway through, or act as an evaluation tool at the end. You can use a module with a kit as well.
National Quality Label (eTwinning)	Recognition at national level of innovation and success in an eTwinning project. The NSS award National Quality Labels to teachers who have successfully applied for the Label through their Desktop.
National Support Service (NSS)	The organisation that represents and promotes eTwinning at national level. Each NSS provides training and support, organises events and runs media and communication campaigns at regional and national level.
Partner finding	The partner-finding tool for schools registered for eTwinning. From the Desktop, eTwinners can search by keyword(s) or fields or post a message on the partner-finding forum.
Partners (eTwinning)	Schools, teachers or other school staff who are official members (and in some cases administrators) of an eTwinning project.
Portal (eTwinning)	The multilingual online platform for eTwinners to conduct eTwinning activities. Individuals must be registered to access all available tools and all information is available in 25 languages: www.etwinning.net .
Prizes (eTwinning)	European eTwinning Prizes are awarded yearly to teachers and pupils who have demonstrated outstanding results in an eTwinning project. The top prizes include participation at the eTwinning Camp. To take part, one must have already received a European Quality Label. Submissions open in October every year and the winners are announced the following January.
Professional Development Workshops	Workshops aimed at teachers who want to improve their skills in ICT and collaboration. They are organised by the NSS and CSS and are held in different European cities throughout the school year.
Project Diary	Each eTwinning project has a Project Diary to describe its activities and progress. Anything from ideas, news, links, pictures and videos can be published.
Profile (eTwinning)	On the eTwinning Desktop, all eTwinners can create their personal and school profiles for others to see and learn about them (eTwinners can comment on or "like" journal posts). Additionally, each project has a project profile where details about the project are available for others to see (eTwinners can then comment on project message boards).
Project (eTwinning)	A project is set up by at least two schools from two different countries. It then has to be approved by the NSS in both countries. Each eTwinning project has its own TwinSpace and Project Diary.
Project Card	The Project Card is a Journal available for each project. It can be used by the partners of the project and their NSS to communicate, give and get support.
Quality Labels	eTwinning awards National Quality Labels and European Quality Labels to project partners who have demonstrated a high level of innovation and success in their project work. National Quality Labels must be applied for through the eTwinning Desktop, while European Quality Labels are awarded automatically once in a year (usually in September).
Registration	When teachers sign up for eTwinning, they gain access to the Desktop with all its available tools. All registered teachers are checked by the NSS in order to maintain a safe and reliable teacher database.
Teachers' Rooms	These informal Rooms are available on the eTwinning Desktop. Teachers can either join or create a Room and discuss an area of interest with others for up to three months. After three months, the Room is closed its content is made available as an archive.
TwinSpace	A safe collaborative platform for schools (teachers and pupils) to use in a project. The TwinSpace offers privacy to each project and is available once the project is approved by the NSS. TwinSpaces can be published on the internet by their administrators.

Appendix 1: The general survey: profile of respondents

Geographical spread

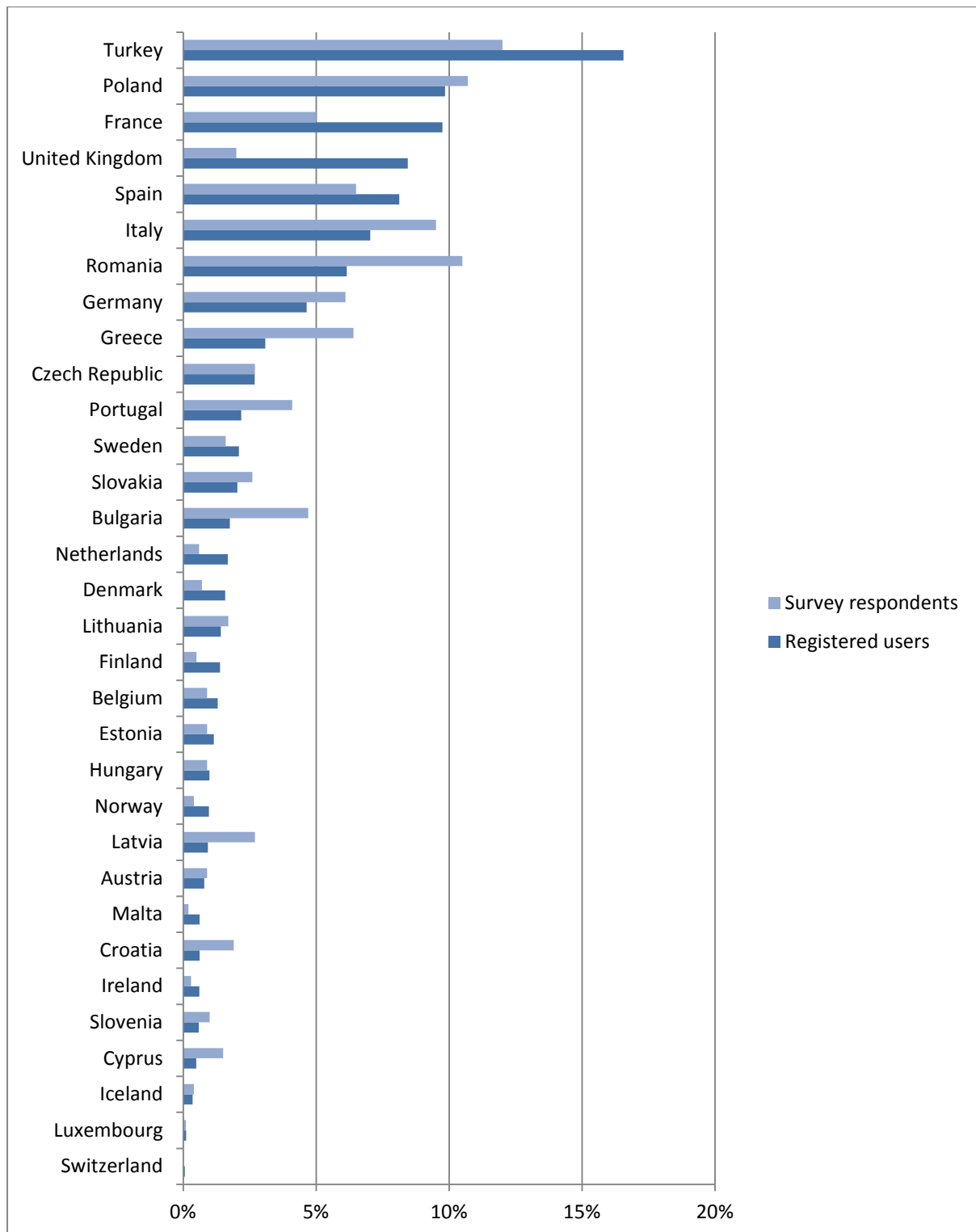
The total number of survey responses was 5,946, with responses in 25 languages and from all eTwinning countries. Table 7 shows the geographical spread of responses.

Table 7: Number of survey responses per country

Country	Frequency
Austria	47
Belgium	48
Bulgaria	242
Croatia	99
Cyprus	77
Czech Republic	138
Denmark	34
Estonia	46
Finland	27
France	253
Germany	312
Greece	328
Hungary	47
Iceland	20
Ireland	14
Italy	485
Latvia	139
Lithuania	87
Luxembourg	3
Malta	8
Netherlands	30
Norway	19
Poland	545
Portugal	208
Romania	537
Slovakia	131
Slovenia	49
Spain	334
Sweden	84
Switzerland	1
Turkey	612
United Kingdom	101

Figure 31 shows that the responses were, in general, representative of the eTwinning population, with notable under-representation of Turkey, France and the UK, and over-representation of Italy, Romania, Germany, Greece, Portugal, Bulgaria, Croatia, Latvia and Cyprus.

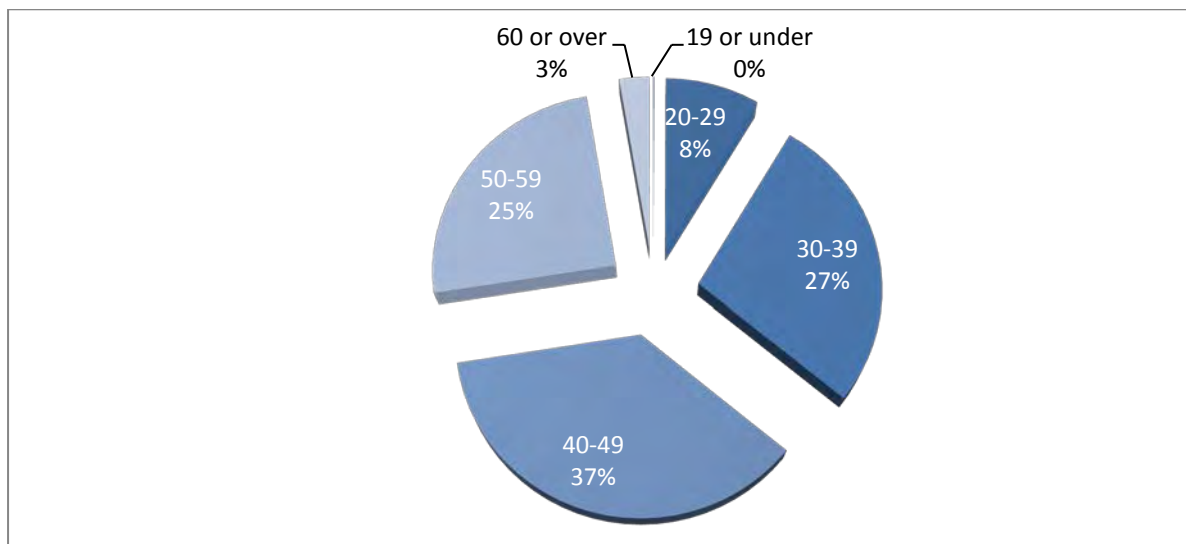
Figure 31: Survey respondents: percentages by country, compared to percentage of total registered users by country (as at 21 May 2012)



Profile of teachers

The majority of teachers in the survey were aged over 30, with the largest group being between 40 and 49 years old (37%), followed by those aged 30-39 (27%) and 50-59 (25%) – see Figure 32. Three out of four (78%) were female.

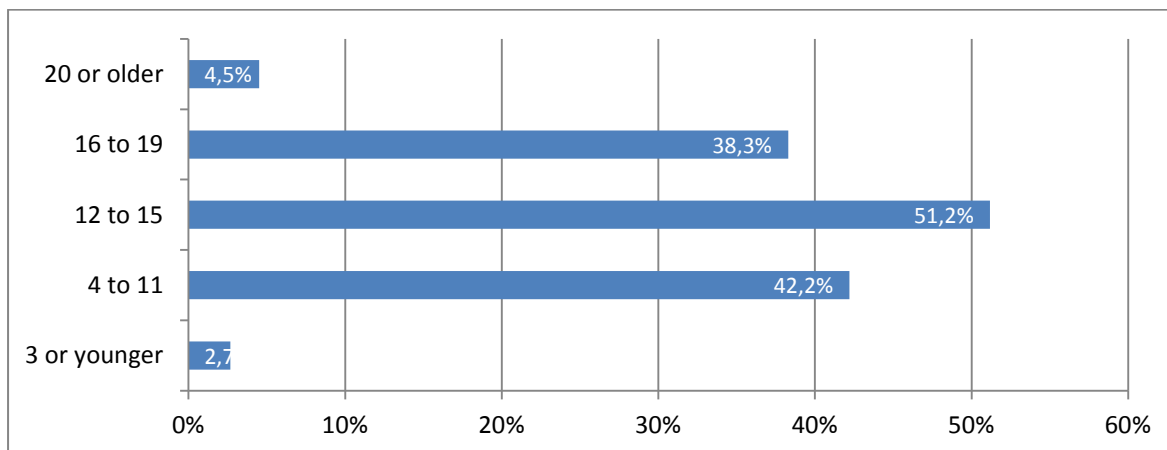
Figure 32: Age of teachers responding to survey



Age of pupils taught

As Figure 33 shows, respondents were most likely to teach pupils aged 12- 15 years old (51.2%), followed by 4-11 years old (42.2%) and 16-19 (38.3%). Note that respondents were able to select more than one option for this question.

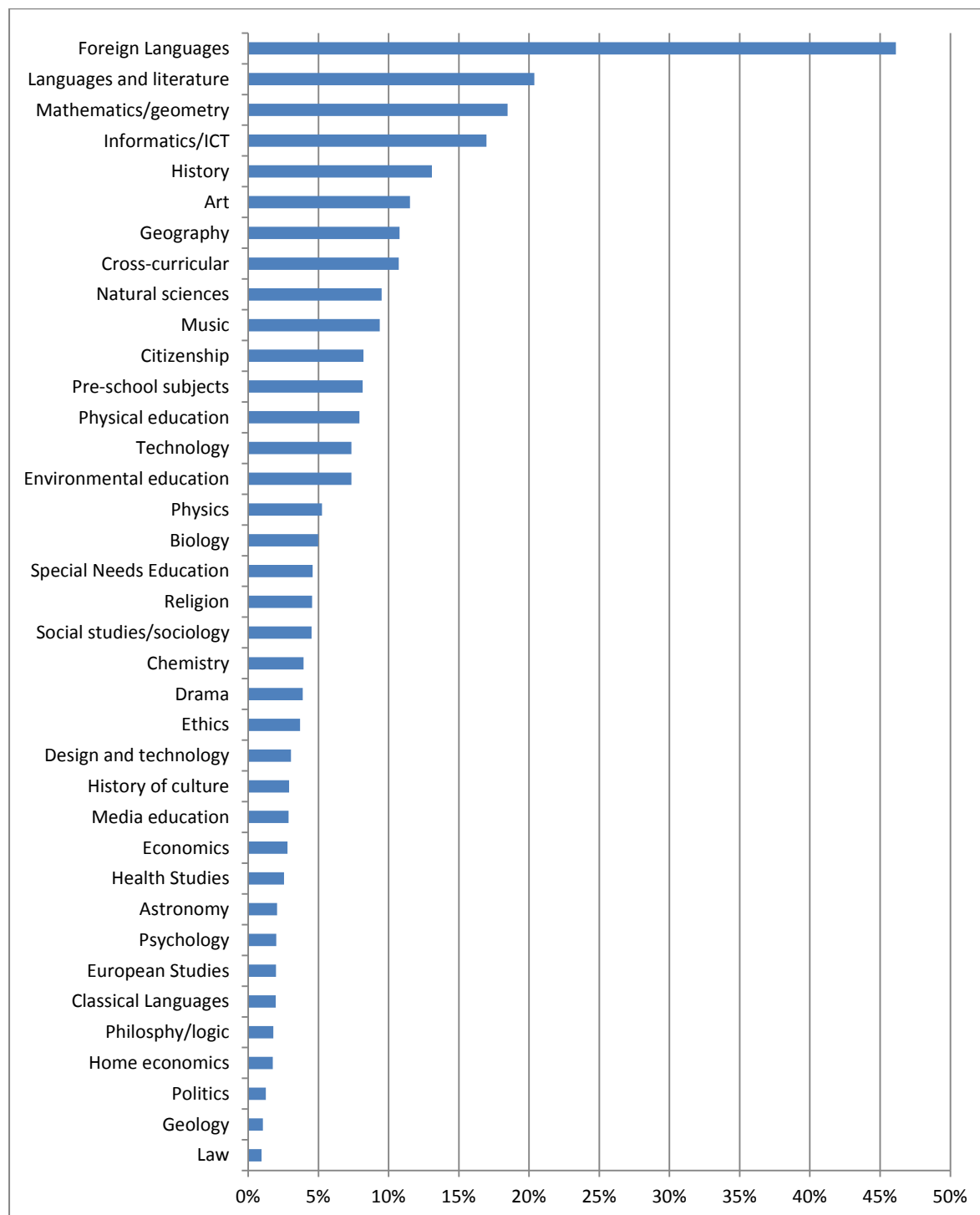
Figure 33: Age of pupils taught by responding teachers



Subjects taught by survey respondents

The majority of survey respondents were foreign language teachers (46%), followed by language and literature teachers (20%), mathematics/geometry (19%) and ICT (17%), and a long tail of other subject areas (Figure 34).

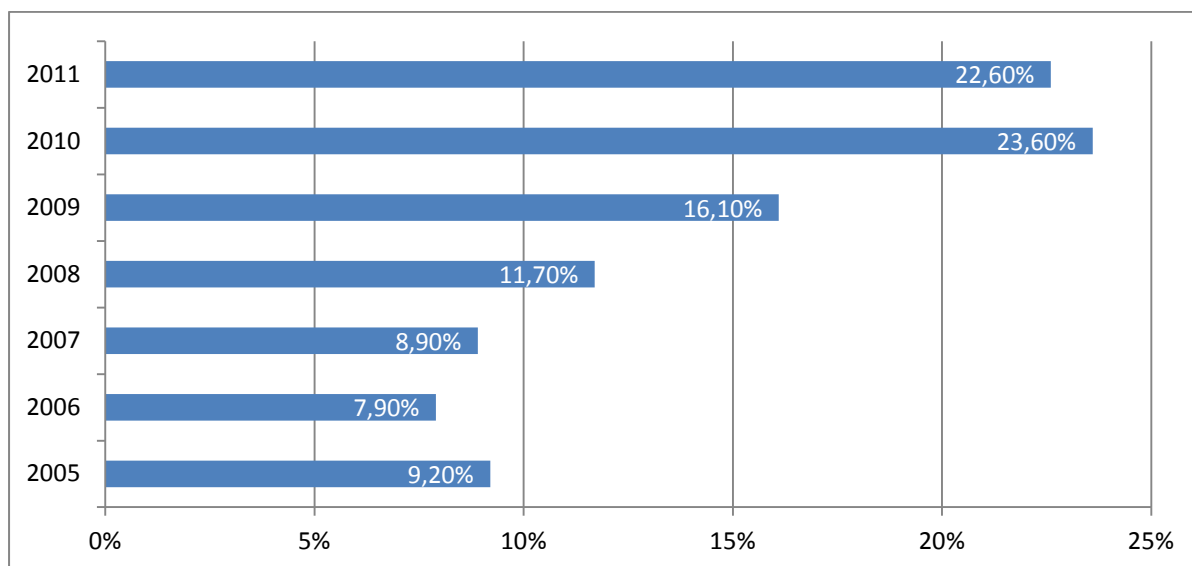
Figure 34: Subject area taught by respondents (multiple response).



Date of registration in eTwinning

The majority of respondents had joined in the last two years, as might be expected, though all levels of experience were well represented (Figure 35).

Figure 35: Year of survey respondents' first involvement in eTwinning



Almost half of the respondents were currently in one or more projects (49%).

Appendix 2: References

Baker-Doyle, Kira & Yoon, Susan A (2011). In search of practitioner-based social capital: a social network analysis tool for understanding and facilitating teacher collaboration in a US-based STEM professional development program. *Professional Development in Education*, 37:1, 75-93.

Cachia et al. (2010). *Creative Learning and Innovative Teaching: Final Report on the Study on Creativity and Innovation in Education in the EU Member States*. Written by Romina Cachia, Anusca Ferrari, Kirsti Ala-Mutka and Yves Punie. Joint Research Centre, Institute for Prospective Technological Studies, Luxembourg, 2010 EUR 24675 EN ISBN 978-92-79-18974-6

European Commission (2007) *Key Competences for Lifelong Learning – European Reference Framework*. Luxembourg: Office for Official Publications of the European Communities, 2007 p 7 - 8

European Schoolnet (2006a) *Reflections on eTwinning: collaboration and eTwinning & enrichment and added value of eTwinning projects*. Written by Conor Galvin et al for the Pedagogical Advisory Group. Brussels, European Schoolnet, September 2006.

European Schoolnet (2006b) *Reflections on eTwinning: pedagogical issues in eTwinning*. Written by Conor Galvin et al for the Pedagogical Advisory Group. Brussels, European Schoolnet, October 2006.

European Schoolnet (2007) *Reflections on eTwinning: cultural understanding and integration & professional development*. Written by Conor Galvin et al for the Pedagogical Advisory Group. Brussels, European Schoolnet, February 2007.

European Schoolnet (2009a). *eTwinning: Beyond school projects: a report on eTwinning 2008-2009*. Written by Christina Crawley, Anne Gilleran, Santi Scimeca, Riina Vuorikari and Patricia Wastiau. Brussels, European Schoolnet, September 2009. ISBN 978-907820996-6

European Schoolnet (2009b). *eTwinning in the classroom: A showcase of good practice (2008-2009)*. Written by Conor Galvin. Brussels, European Schoolnet, December 2009. ISBN 978-949047731-8

European Schoolnet (2010a). *eTwinning: Building the community of schools for Europe*. Edited by Christina Crawley, Paul Gerhard, Anne Gilleran and Alexa Joyce. Brussels, European Schoolnet, undated [2010]. ISBN 978-907820900-3

European Schoolnet (2010b). *eTwinning: Teachers' professional development: an overview of current practice*. Written by Riina Vuorikari. Brussels, European Schoolnet, December 2010. ISBN 978-94904776-2

European Schoolnet (2010c). *Voices of eTwinning: teachers talk*. Written by Christina Crawley, Anne Gilleran, Donatella Nucci and Santi Scimeca. Brussels, European Schoolnet, December 2010. ISBN 9789490477479

European Schoolnet (2011a). *Pupils in eTwinning: case studies on pupil participation*. Edited by Patricia Wastiau, Christina Crawley, Anne Gilleran. Brussels, European Schoolnet, November 2011. ISBN 978-949047780-6

European Schoolnet (2011b) *eTwinning learning events 2011: report [draft]*

European Schoolnet (2011c). *My eTwinning cookbook: 50 recipes for school collaboration and professional development in Europe*. Edited by Christina Crawley and Anne Gilleran. Brussels, European Schoolnet, December 2011. ISBN 978-940477786-8

Eurydice (2011) Key Data on Learning and Innovation through ICT at School in Europe. Brussels, Education, Audiovisual and Culture Executive Agency, 2011. ISBN 978-92-9201-184-0 <http://eacea.ec.europa.eu/education/eurydice/>. Main findings p. 9 - 15

Huei-Tse Hou, Kuo-En Chang & Yao-Ting sung (2009). Using blogs as a professional development tool for teachers: analysis of interaction behavioural patterns. *Interactive Learning Environments*, 17:4, 325-340.

OECD (2009). *Creating effective teaching and learning environments: first results from TALIS (Teaching and Learning International Survey)*. Paris, Organisation for Economic Co-operation and Development, 2009. ISBN 978-92-64-05605-3

Redecker, Christine (2009). *Review of Learning 2.0 Practices: Study on the Impact of Web 2.0 Innovations on Education and Training in Europe*. Joint Research Centre Institute for Prospective Technological Studies (ITPS) EUR – Scientific and Technical Research series: EUR 23664 EN. Luxembourg: Office for Official Publications of the European Communities, 2009 ISSN 1018-5593

Romano, Molly E (2008). Online discussion as a potential professional development tool for first-year teachers. *Technology, Pedagogy and Education*, 17:1, 53-65.

Vuorikari, Riina & Scimeca, Santi (2012). Social learning analytics to study teachers' large-scale professional networks. Brussels, European Schoolnet. A TeLLNeT paper presented at Open and Social Technologies for Networked Learning 2012 in Estonia. <http://ifip-ost12.tlu.ee/wp-content/uploads/2012/06/vuorikari.pdf>

Yisemina Karagiorgi & Chrystalla Lymbouridou (2009). The story of an online teacher community in Cyprus. *Professional Development in Education*, 35:1, 119-138

Appendix 3: Groups and rooms analysis

About the analysis

In order to gain a better understanding of levels of teachers' professional development through the use of online eTwinning tools, we conducted an indicative content analysis of 11 Groups and 112 Teachers' Rooms on the eTwinning platform. Drawing on research methodology and coding criteria from previous studies of teachers' professional development through social networking⁵⁸, a coding framework was developed by the research team (Table 8).

Table 8: The framework and criteria

	Explicitly project-related	General teaching and methods	General or social – unrelated to professional issues
Sharing/comparing of information or experience (single messages on a theme or thread discussing own experience without reference to others in the thread)	<i>Messages with specific reference to past, present or future eTwinning projects</i>	<i>Messages with specific reference to teaching and learning, including methods, activities, etc</i>	<i>Messages with no reference to projects or teaching and learning, but including: social comments and greetings, logistics for meetings etc,</i>
Discussion, exploration, agreement or disagreement about shared information or experience (messages which respond, comment or expand on issues, making explicit reference to previous posts on a thread and reacting to other messages on the same theme)	<i>Messages with specific reference to past, present or future eTwinning projects</i>	<i>Messages with specific reference to teaching and learning, including methods, activities, etc</i>	<i>Messages with no reference to projects or teaching and learning, but including: social comments and greetings, logistics for meetings etc,</i>
Posts of photos, files and links	<i>Posts with little or no text, which share a photos/ files/ link to specific project-related material, e.g. project websites</i>	<i>Posts with little or no text which share a photos/ files/ link to materials for teaching and learning</i>	<i>Posts with little or no text which share a photos/ files/ link to general material that is not project or teaching related</i>
Comments on these photos, files and links	<i>Messages that make specific reference to past, present or future eTwinning projects</i>	<i>Messages that make specific reference to teaching and learning</i>	<i>Messages that are not project or teaching related</i>
Technology related comments and questions	<i>Messages discussing technology issues, with specific reference to eTwinning projects</i>	<i>Messages that discuss own experience with specific reference to teaching and learning</i>	<i>Messages that discuss own experience not project or teaching related</i>

⁵⁸ Huei-Tse Hou, Kuo-En Chang & Yao-Ting Sung (2009): *Using blogs as a professional. development tool for teachers: analysis of interaction behavioural patterns*, *Interactive Learning Environments*, 17 ;4, 325-340; Yiasemina Karagiorgi & Chrystalla Lymbouridou (2009): *The story of an online teacher community in Cyprus*, *Professional Development in Education*, 35:1, 119-138.

This framework allowed education researchers to analyse both interaction frequency and quality of interactions. Each post was read and coded once and total numbers for each room and group were recorded by category according on a data collection tool, alongside basic information on the Group or Room, such as the name, date established and number of members.

The findings

Participation

Across all the Groups and Teachers' Rooms analysed, there were 13,289 members, with an average of 207 members in each Group and 101 in each Room.

eTwinners participating in one Group or Room were likely to be participating in others: a count of 2,454 Group members showed that about half (1,132) were members of more than one Group.

More difficult to assess was how many members were active - reading content and posting on the site - and how many simply signed up and never returned. In the Teachers' Rooms, a total of 11,009 members in the sample collectively made only 6,621 posts, suggesting at least 40% were inactive; the number was probably far higher when multiple posts by the same people are taken into consideration.

In some of the rooms analysed, the creator/moderator and a handful of others were the only ones to post messages (see, for example, the Teachers' Rooms *Challenging students with Maths in eTwinning* or *Plate-forme eTwinning: atelier pratique (2011-2012)*). Even where there were others posting on discussion threads, in some Rooms this was simply to thank the moderator (see *Ideas for Teaching English* or *Social Solidarity*).

Interactions

Understanding the types and qualities of interactions allows speculation about the networking, learning and professional development gains of active participants of Groups and Teachers' Rooms. Table 9 and Table 10 summarise the total number of posts by code, across Groups and Rooms respectively.

Table 9: Summary of findings in Groups: number and nature of postings

	Explicitly project-related	General teaching methods	General or social - unrelated to professional issues	Total
Sharing/comparing of information or experience (single messages on a theme or thread)	28	38	38	104
Discussion, exploration, agreement or disagreement about shared information or experience (messages reacting to other messages on the same theme)	22	45	65	132
Posts of photos and files and links	57	10	170	237
Comments on these photos and files and links	0	0	4	4
Technology related comments and questions	0	0	0	0
Total	107	93	277	477

According to this analysis, a high proportion of interactions in both Groups and Teachers' Rooms were unrelated to eTwinning projects or teaching methods in general - 58% of all Group posts and 47% of all Room posts. Many of the posted messages were to greet or

thank other members: necessary exchanges in any interactions in a social networking context, but perhaps not to the extent that they take up half of the conversation.

Relatively few posts in any category were on the topic of general teaching methods – just 20% of posts in the Groups and 23% in Rooms. In the Rooms, the most prolific type of post in this area was sharing links to teaching resources. However, though probably useful, these posts failed to stimulate comment or debate: most of the responses to links were of a general or social nature (see Table 11 for an example of this kind of thread. Note also that of the 24 posts shown, 13 are by the moderator).

Table 10: Summary of findings in Teachers' Rooms: number and nature of postings

	Explicitly project-related	General teaching methods	General or social - unrelated to professional issues	Total
Sharing/comparing of information or experience (single messages on a theme or thread)	660	316	800	1776
Discussion, exploration, agreement or disagreement about shared information or experience (messages reacting to other messages on the same theme)	712	262	1421	2395
Posts of photos and files and links	63	626	56	745
Comments on these photos and files and links	53	172	522	747
Technology related comments and questions	362	89	168	619
Total	1850	1465	2967	6282⁵⁹

Discussion that develops and builds on shared ideas⁶⁰ was happening to some extent: in Groups, it was more focused on general teaching methods, and in Teachers' Rooms more likely to be project specific. This may reflect the more structured nature of Groups, which have clearer leadership and coordination: the eTwinning Groups pilot study found that "a key factor to emerge was that users require at least some structured leadership, and want input from experts to fuel discussions and idea building".⁶¹ However, in both Groups and Rooms, a high proportion of posts that did respond to other comments in the thread, thereby building a discussion, were of a general or social nature (49% and 59%, respectively).

⁵⁹ Posts duplicated through user error were only counted once.

⁶⁰ "the extent of knowledge construction in discussions (i.e. posted articles and replies) is a key indicator for us to understand the depth of teachers' interactions" Huei-Tse Hou, Kuo-En Chang & Yao-Ting sung (2009). Using blogs as a professional development tool for teachers: analysis of interaction behavioural patterns. Interactive Learning Environments, 17:4, p 327

⁶¹ European Schoolnet (2009a). eTwinning: Beyond school projects: a report on eTwinning 2008-2009. Written by Christina Crawley, Anne Gilleran, Santi Scimeca, Riina Vuorikari and Patricia Wastiau. Brussels, European Schoolnet, September 2009. ISBN 978-907820996-6

Table 11: Example thread: a fantastic site to practise English vocabulary

Names removed for anonymity: C1 is the Room's creator and respondents are coded R1, R2, etc.

C1	A fantastic site to practise English vocabulary http://www.languageguide.org/english/		Dear [R8], I 'm glad you like them..and thank you for your nice words:) take care [C]
R1	Many thanks for sharing!		
C1	you 're welcome,[R1]:) [C]		
R2	I liked it..it is useful for me..thanks for sharing,[C]:)	R9	it is a very useful website. I like it very much.Than yu for sharing.my students will love it.:)
R3	Thanks a lot for sharing it. My students will love it.	C1	<i>Quote:</i> <i>it is a very useful website. I like it very much.Than yu for sharing.my students will love it.:)</i> Hi [R9], I am happy you like it:) All the best [C1]
C1	you're welcome,[R2] and [R3] :)		
R4	The site shared with us is really useful. Thank you.	C1	ONE MORE ACTIVITY : IT's nearly the end of school days and this activity (learning the names of European Countries)could be a nice one for your students: http://www.languageguide.org/english/vocab ulary/europe/
C1	I agree with you dear [R4]:)		
R5	Indeed a good site to expand vocabulary which is one of the most difficulties for students.	R2	<i>Quote:</i> <i>ONE MORE ACTIVITY :</i> <i>IT's nearly the end of school days and this activity (learning the names of European Countries)could be a nice one for your students:</i> http://www.languageguide.org/english/vocab ulary/europe/ sooo nice activity..thanks..
C1	it's really a useful site ,[R5]..		
R2	yesterday I used this site in my classroom and my students loved it so much. They learnt and had fun at the same time..Thanks again [C] for your great ideas teachers room:)	C1	thank you for your interest to this room dear [R2],:) [C1]
R6	IT LOOKS VERY INTERESTING. BEST WISHES, [R6]		
C1	I am glad to hear that [R2]:)my students also liked this site. see you:)		
C1	thanks for your nice comment Dear [R6] :) all the best [C1]		
R7	Marvellous! Fantastic! Awesome!		
R8	You did it once more - I often wonder where you get all those links from. It is a great site - especially for beginners. Thanks for digging it out! R8		
C1	thanks for your comment ,Dear [R7]:)		
C1	<i>Quote:</i> <i>You did it once more - I often wonder where you get all those links from. It is a great site - especially for beginners. Thanks for digging it out!</i> [R8]		
C1	this can be a nice activity for summer .. http://www.languageguide.org/english/vocab ulary/writing/		

Appendix 4: Summary of key findings from the case studies

	Age of pupils	Pupil participation	Integration within the school curriculum	Teacher professional development	Impact on teaching methodologies and pedagogy	Collaboration within the school	Attitudes to international cooperation	Status and recognition
Austria	An upper secondary and vocational school Pupils in project: 16-19 years old	<ul style="list-style-type: none"> • Around 30% of the pupils in the school have been or are involved in an eTwinning project • The pupils did not participate in planning or designing the projects and sub-projects or modules • They do have significant autonomy and responsibility in the projects for task design and use of technology 	<ul style="list-style-type: none"> • All the projects, sub-projects and activities have been designed to be fully integrated in the school curriculum • This integration was facilitated by existing project-oriented methodologies in most subjects • The use of ICT is also fully integrated into teaching and curriculum delivery in all subjects • Each project was cross-curriculum, involving activities relevant to more than one curriculum area 	<ul style="list-style-type: none"> • Teachers involved in eTwinning projects do not associate eTwinning with professional development, but see the platform as a tool for project development and delivery • Several teachers reported improved professional satisfaction and sense of achievement arising from their project work 	<ul style="list-style-type: none"> • Because teaching in the school is project oriented anyway and using ICT is integrated across the whole curriculum, the eTwinning projects and activities have not involved any radically different or new methods or approaches 	<ul style="list-style-type: none"> • The projects have all had a 'top-down' design approach led by the Deputy Head and Coordinator of eTwinning and other Comenius work • About eight out of 38 teachers are actively involved in eTwinning at any one time 	<ul style="list-style-type: none"> • A 'European outlook' is part of the school's mission statement and international projects have been part of the school programme since 2008 • Language learning is the school's main motivation for engaging in international projects 	<ul style="list-style-type: none"> • All teachers are expected to become involved in international cooperation projects as a matter of course • eTwinning does not attract any special status or recognition for individual teachers

	Age of pupils	Pupil participation	Integration within the school curriculum	Teacher professional development	Impact on teaching methodologies and pedagogy	Collaboration within the school	Attitudes to international cooperation	Status and recognition
Belgium	Secondary school Pupils in project: 14-18 years old	<ul style="list-style-type: none"> • Years 5 and 6 are included in project work • Pupils carry out a research project on a topic of their choice • Previously, pupils were given autonomy in implementing activities, they did not engage with or acknowledge partners' work, and the teacher has decided to provide stricter guidance and supervision in future 	<ul style="list-style-type: none"> • eTwinning is used for the final research project in human and social sciences, for which pupils are graded 	<ul style="list-style-type: none"> • The eTwinning teacher is an eTwinning Ambassador, but this has not meant any specific tasks or responsibilities • Increased use of ICT and broadening of horizons were mentioned as the main impacts for the participating teacher 	<ul style="list-style-type: none"> • eTwinning is being used as an interesting way to study human and social sciences and to provide partnerships as a real context for pupils' final projects • Methods which gave pupils more control over the projects were not successful • All activities take place in lesson time 	<ul style="list-style-type: none"> • Currently only one teacher is involved, although two others have recently registered on the site • The Director is aware of activities and can see some potential for eTwinning, but relies on teachers to pick this up themselves 	<ul style="list-style-type: none"> • The school is a member of the European Learning Environment in schools network and has other international links including through Comenius 	<ul style="list-style-type: none"> • A Quality Label was awarded for one of the projects, which has been acknowledged by the Director and other staff • There are no specific benefits for the teacher in being involved
Cyprus	Senior secondary school Pupils in project: 15-18 years old	<ul style="list-style-type: none"> • The eTwinning pupils decide on the different tasks and activities and decisions about music are made by the pupils, not imposed by teachers • The pupils administer many of the project websites 	<ul style="list-style-type: none"> • Projects – including eTwinning – are entirely separate from the delivery of the curriculum and all project work is undertaken outside the core school hours • Recent work on 	<ul style="list-style-type: none"> • Participating teachers report increased confidence using ICT and interest in more learner-centred approaches • The language teacher felt that communication with her French colleague 	<ul style="list-style-type: none"> • The eTwinning coordinator is keen on learner-centred teaching approaches and feels involvement in the projects has affected the way she manages and conducts her classes • There is limited 	<ul style="list-style-type: none"> • Limited collaboration among teachers on eTwinning projects has led to better working relationships between colleagues, but scope for increased collaboration is constrained by the 	<ul style="list-style-type: none"> • The Principal believes European projects like eTwinning are absolutely necessary for cultural and information exchange, and considers pupil exchange programmes the 	<ul style="list-style-type: none"> • eTwinning (and other project work that does not involve international pupil exchanges and visits) does not attract much status or recognition for the participating teachers

	Age of pupils	Pupil participation	Integration within the school curriculum	Teacher professional development	Impact on teaching methodologies and pedagogy	Collaboration within the school	Attitudes to international cooperation	Status and recognition
		and Twinspace • Pupils lacking confidence were gradually transformed through projects and developed a sense of self worth	a project led by a language teacher was partially integrated when it overlapped with the topic/ content of the official curriculum	contributed to substantial language development, increased confidence and professional development, through discussions and exchange of information, links, materials etc.	opportunity for the inclusion of new teaching methodologies into main curriculum teaching overall	lack of recognition of project work as part of curriculum delivery	most useful. However, there is no flexibility in the schedule to integrate project work	
Finland:	Combined primary and secondary school Pupils in project: 13 years old	<ul style="list-style-type: none"> • In past projects, all ages and classes have been included in project work, including children with special needs • Pupils aged 13 participate in the most recent project • Activities have included direct communication with partners • There has been a pupil consultation on aspirations for future eTwinning projects 	<ul style="list-style-type: none"> • eTwinning projects have primarily been based on language learning • ICT tools were used in projects 	<ul style="list-style-type: none"> • Teachers have freedom to plan and organise their eTwinning project work • Teachers report personal advantages such as new friendships and motivation to travel • Teachers have developed their ICT skills and language skills and kept up-to-date with their own subject 	<ul style="list-style-type: none"> • Low levels of ICT provision in the school are a huge barrier • eTwinning projects give more meaning to a subject • Cooperative and interesting ways of teaching and learning have been introduced through projects 	<ul style="list-style-type: none"> • The main eTwinning teacher actively promotes eTwinning to her colleagues • There has been an increase in registered eTwinners over the last year, to four eTwinning teachers • The head teacher has not been personally involved but gives full support to teachers and encourages them to join and create projects 	<ul style="list-style-type: none"> • This school, and the surrounding area, has a long history of international collaboration and exchange • There are a number of international activities going on all the time 	<ul style="list-style-type: none"> • Teachers are paid one extra hour per week in salary for project work • The projects are recognised as a positive benefit outside of the school, including amongst parents and in the local education department

	Age of pupils	Pupil participation	Integration within the school curriculum	Teacher professional development	Impact on teaching methodologies and pedagogy	Collaboration within the school	Attitudes to international cooperation	Status and recognition
Germany 1	Lower secondary school Pupils in project: 14-16 years old	<ul style="list-style-type: none"> Pupil participation is reserved for implementing project modules and sub-projects, where pupils have a degree of autonomy in decision making. Pupils do not and have not participated in project planning 	<ul style="list-style-type: none"> eTwinning activities are embedded into curriculum areas of English and ICT Those modules and activities that involve history, geography and politics, for example, are treated like extra-curricular activities, sometimes done at home. In most cases, teachers of these subjects are not involved 	<ul style="list-style-type: none"> The eTwinning teachers express a high degree of professional satisfaction and improved ICT skills as the main benefits of their involvement 	<ul style="list-style-type: none"> Overall, the school believes that eTwinning activities have had no major impact on the status of ICT in the school nor have they changed teaching or learning practices, or methodologies in other subjects, to any significant extent 	<ul style="list-style-type: none"> In this school the Comenius school partnership is run completely separately from eTwinning activities Only two teachers are actively involved in eTwinning and they are relatively isolated. The small number of teachers who work part time, and other international projects, preclude the wider involvement of more teachers in eTwinning 	<ul style="list-style-type: none"> The school has a long history of international cooperation and exchanges, including involvement in regular student exchanges with schools in Poland, France and Denmark The uncertain future (the school will close within four years) is a particular constraint on international cooperation Almost a third of the teachers are active in international cooperation 	<ul style="list-style-type: none"> eTwinning teachers receive no formal recognition for their activities Overall, involvement in eTwinning projects has helped to shape and raise the profile and reputation of the school during a very difficult and uncertain period Receiving a Quality Label and other national and European awards for an eTwinning project was a particularly special event for the school

	Age of pupils	Pupil participation	Integration within the school curriculum	Teacher professional development	Impact on teaching methodologies and pedagogy	Collaboration within the school	Attitudes to international cooperation	Status and recognition
Germany 2	Lower secondary school Pupils in projects: 10-16 years old	<ul style="list-style-type: none"> The theme of the project was chosen by teachers and parents but decisions within the project about what activities to pursue are taken in a democratic / participatory way 	<ul style="list-style-type: none"> The eTwinning project is mainly concerned with science, but other subjects are added according to need Activities are in regular lesson times, with optional workshops 	<ul style="list-style-type: none"> Teachers participating in eTwinning do not equate it with professional development though there have been some personal development gains 	<ul style="list-style-type: none"> Some teachers see the positive impact of open project work and plan to apply this kind of work more often in other contexts 	<ul style="list-style-type: none"> eTwinning is a permanent topic in staff meetings and conferences: all teachers know the basics about purpose, methods and objectives and are encouraged to participate. It is recognised by parents, pupils and the local community as positive, but little interest from government officials or the Ministry of Education. 	<ul style="list-style-type: none"> The school's position near the border with France led to twinning with a French school decades ago. These experiences were developed into a cross-curricular school policy of 'European understanding' 	<ul style="list-style-type: none"> The school was disappointed that the Ministry of Education did not attend the Quality Label awards ceremonies, or show much interest in its eTwinning successes eTwinning is recognised by parents and in the local community as a positive initiative

	Age of pupils	Pupil participation	Integration within the school curriculum	Teacher professional development	Impact on teaching methodologies and pedagogy	Collaboration within the school	Attitudes to international cooperation	Status and recognition
Germany 3	Lower secondary school Pupils in projects: 10-15 years old	<ul style="list-style-type: none"> • Pupils were asked if they wished to start an eTwinning project • The first eTwinning project led to definite and unexpected improvement among grade 5 pupils in ICT skills and understanding 	<ul style="list-style-type: none"> • The second eTwinning project is more integrated into the curriculum than the first, which suffered from limited involvement by teachers other than the eTwinning coordinator 	<ul style="list-style-type: none"> • No teachers in the school have taken up eTwinning professional development opportunities as yet. • However, teachers report a high degree of professional satisfaction from the successful engagement of their pupils in eTwinning activities 	<ul style="list-style-type: none"> • eTwinning was initially seen as a tool to develop creativity and innovation in teaching methodology • However, the impact on methodologies in use in the school has been minimal as the project approach to teaching was already adopted in the school 	<ul style="list-style-type: none"> • The second eTwinning project is much more of a 'whole school' collaborative project 	<ul style="list-style-type: none"> • The school's engagement with eTwinning was its first step in international cooperation and proved so successful with pupils and parents that the school management is now determined to develop a distinct European dimension and to promote trans-national contacts 	<ul style="list-style-type: none"> • Participants were disappointed that no government official, school inspector or community officer attended the Quality Label award ceremony for the first project • The two eTwinning projects, combined with some pupil mobility in the link with the Comenius school partnership, have greatly raised the profile of the school within the community and among parents
Ireland	Primary school Pupils in projects: 10-12 years old	<ul style="list-style-type: none"> • All pupils in the oldest two classes are involved in eTwinning, a total of 18 pupils • Activities involve writing letters and taking turns to type them onto the Twinspace 	<ul style="list-style-type: none"> • eTwinning is not integrated into the curriculum, but covers curriculum areas including IT, geography and French • More time has been allocated to eTwinning this 	<ul style="list-style-type: none"> • The eTwinning teacher has benefited a great deal from improved IT skills and confidence • The eTwinning teacher has not used the networking aspects 	<ul style="list-style-type: none"> • Within eTwinning lessons there is a more relaxed atmosphere than in other lessons; the pupils and the teacher learn from each other and discuss issues as a group 	<ul style="list-style-type: none"> • This is a very small school, and though teachers are aware of what is happening, it is the sole responsibility of one teacher • There is no collaboration 	<ul style="list-style-type: none"> • The school is new to international cooperation and linking to other schools • Progress with eTwinning has been slow and still remains a fairly small part of the 	<ul style="list-style-type: none"> • The eTwinning teacher carries out eTwinning in addition to her normal teaching duties • At the beginning in particular, this involved a lot of extra work in her

	Age of pupils	Pupil participation	Integration within the school curriculum	Teacher professional development	Impact on teaching methodologies and pedagogy	Collaboration within the school	Attitudes to international cooperation	Status and recognition
		<ul style="list-style-type: none"> Decisions are made as a class on what the topic will be 	year but it is not regular, and often gets replaced by higher curriculum priorities	<ul style="list-style-type: none"> of the eTwinning website Other teachers are not engaged with eTwinning 	<ul style="list-style-type: none"> Impact on teaching methodology is not recognised at school management level 	<ul style="list-style-type: none"> across classes. Despite partnering with a French school and using some French words in eTwinning, it is felt French classes should be kept separate 	<ul style="list-style-type: none"> school's work With improved IT infrastructure, the school hopes international work will become easier and more regular 	<ul style="list-style-type: none"> own time There is no official recognition or incentives for being involved in eTwinning
Italy 1	Primary school Pupils in projects 7-15 years old	<ul style="list-style-type: none"> 15 pupils are currently involved in a project Pupils communicate with their partners through the Twinspace and through posting letters and items Activities include creating videos and organising competitions and games 	<ul style="list-style-type: none"> Curriculum areas depend on the project, but most include ICT, foreign languages (English) and technology There are examples of strong integration into the curriculum through projects focused on mathematics and ecology 	<ul style="list-style-type: none"> The main eTwinning teacher has participated in training and found it useful Other teachers have enjoyed learning about other cultures and learnt a lot by talking to teachers in other countries Language skills were also improved by participation. 	<ul style="list-style-type: none"> Teachers state that eTwinning has helped them have new ideas and has improved their teaching methodology 	<ul style="list-style-type: none"> One teacher started on eTwinning and four teachers have joined in the last year Non-eTwinning teachers are sometimes engaged in eTwinning activities and they are all kept informed of eTwinning activities The school management is supportive 	<ul style="list-style-type: none"> There is a positive attitude towards international cooperation and other collaborative projects 	<ul style="list-style-type: none"> eTwinning is recognised as a positive influence by the school management and other teachers in the school The time spent by teachers is acknowledged by school management

	Age of pupils	Pupil participation	Integration within the school curriculum	Teacher professional development	Impact on teaching methodologies and pedagogy	Collaboration within the school	Attitudes to international cooperation	Status and recognition
Italy 2:	Secondary vocational school Pupils in projects 15-18 years old	<ul style="list-style-type: none"> • 30 pupils are involved, aged 15 to 18 years • Pupils write to pen-pals in other countries and exchange work • They have little say in decision making in eTwinning 	<ul style="list-style-type: none"> • The project covers English, catering and nutrition • An important target is to develop skills for employment, particularly in the tourist industry 	<ul style="list-style-type: none"> • The eTwinning teacher has attended a regional eTwinning conference • She has been invited to conferences but is not able to attend because of the cost of travel 	<ul style="list-style-type: none"> • Lessons have become more engaging and pupils are more motivated 	<ul style="list-style-type: none"> • Teachers and the head teacher are kept informed and are supportive • Parents have been involved and appreciate the learning for the pupils and themselves 	<ul style="list-style-type: none"> • European culture is a fundamental part of the school vision and eTwinning is seen as an opportunity for openness and exchange 	<ul style="list-style-type: none"> • Local government has given some financial support for eTwinning • The eTwinning teacher is given some extra time for project work
Italy 3	Nursery and primary school Pupils in projects 9-11 years old	<ul style="list-style-type: none"> • Pupils do not usually make decisions. However, in a joint eTwinning/ Comenius school partnership the student council took charge of the long decision process • There has been no direct online exchanges between pupils 	<ul style="list-style-type: none"> • eTwinning is integrated into the curriculum and annual learning plans for teachers • The main curriculum areas are Italian, foreign languages, geography, history and ICT 	<ul style="list-style-type: none"> • Teachers regularly attend meetings and conferences on eTwinning • They use online tools and network with other teachers through Facebook and a national teacher networking site • Teachers appreciate being part of a wide professional network 	<ul style="list-style-type: none"> • There has been exchange among teachers on methodologies for other subjects • eTwinning is considered to be a space that facilitates group work and cooperation between pupils 	<ul style="list-style-type: none"> • Current and past head teachers are enthusiastic about eTwinning • The number of teachers involved is increasing; there is now an eTwinning team at the school and projects are planned involving the whole school 	<ul style="list-style-type: none"> • International collaboration is highly regarded • The school policy and education plan include international collaboration and participation in European projects. English, French and Spanish are taught 	<ul style="list-style-type: none"> • There is no status or recognition given to teachers participating in eTwinning. They have to be enthusiasts, giving up their own free time • The eTwinning activities are widely known and acknowledged by the local authority and parent association

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Lithuania 1:	Senior secondary school Pupils in projects 16-20 years old	<ul style="list-style-type: none"> • Even though eTwinning teachers and pupils emphasise that pupils' ideas and choices are both respected and encouraged, in reality, it is a teacher who actually monitors, controls and fosters the eTwinning project 	<ul style="list-style-type: none"> • eTwinning has two main lines in the school, languages and health sciences. • The continuation of eTwinning projects – particularly in languages – over several years appears to have had the long-term effect of reviving pupils' interest in humanities, languages and literature 	<ul style="list-style-type: none"> • eTwinning is considered to be one of the pathways for teacher qualification development • eTwinning is perceived as a good vehicle to introduce innovations into the curriculum, and especially into extra-curricula education. • Teachers are encouraged to participate in seminars, to share ideas, to help each other and to work in teams, and to cooperate with each other 	<ul style="list-style-type: none"> • The school has a strategy to guarantee high quality education, including through the employment of different teaching/learning methods. Project activities are employed as a means for achieving the strategy rather than as stand-alone activities 	<ul style="list-style-type: none"> • eTwinning has become a natural, integral and rewarding aspect of school life, even if it is largely owing to the direct activities of one particular teacher 	<ul style="list-style-type: none"> • The school is committed to engaging in international cooperation projects, especially within the context of language learning 	<ul style="list-style-type: none"> • eTwinning has a high status and reputation within the school, community and with the local education authorities

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Lithuania 2	Combined primary and secondary school Pupils in projects 12-16 years old	<ul style="list-style-type: none"> The pupils have a say in what project activities will be done and how, though the project themes and partners are developed and chosen by the core eTwinning team 	<ul style="list-style-type: none"> Recent eTwinning projects have become increasingly cross-curricula, incorporating science, history and language studies 	<ul style="list-style-type: none"> Teachers in the school have been supported and encouraged to participate in national eTwinning professional development meetings and events by the core eTwinning team, and by the head teacher. This is reflected in increased team work across curriculum subjects and confidence in using ICT and languages 	<ul style="list-style-type: none"> Project work is encouraged by the school as a line of pedagogical activity and eTwinning is integrated into this ICT is used as an integral part of pedagogical activities (including eTwinning) 	<ul style="list-style-type: none"> The core eTwinning team works to involve teams of teachers from different curriculum subjects in the delivery of eTwinning activities 	<ul style="list-style-type: none"> eTwinning has been influential in helping the school to develop a wider portfolio of international cooperation projects, and eTwinning and other Comenius projects are highly integrated 	<ul style="list-style-type: none"> Success in eTwinning has evidently had a positive impact on the school's identity – they see themselves as the school where eTwinning works and is acknowledged and is supported, and this message is becoming widely known beyond their school community. This has been reinforced by one of the core eTwinning team winning a national award
Netherlands	Secondary school Pupils in projects 13-14 years old	<ul style="list-style-type: none"> The choice of the age and groups involved is purely based on the eTwinning teacher's class; parallel groups under other teachers are not using eTwinning 	<ul style="list-style-type: none"> eTwinning is in the international plan, but is not officially integrated into the curriculum The eTwinning teacher has allocated one of 	<ul style="list-style-type: none"> One teacher is involved in eTwinning projects, with support of the international coordinator, although other language teachers are starting to 	<ul style="list-style-type: none"> The eTwinning teacher views this is a new approach to teaching the same content, providing pupils with a real audience, which impacts on 	<ul style="list-style-type: none"> Teachers and management are aware that eTwinning activities are taking place, and an eTwinning information day for all language teachers is planned 	<ul style="list-style-type: none"> The school has a history of international projects and exchanges, with more activities planned for the future There has been a 	<ul style="list-style-type: none"> eTwinning is the initiative of the teacher and the international coordinator, there is no specific support or recognition of that The international

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		<ul style="list-style-type: none"> Pupils exchange letters and other documents directly with a partner in another school, primarily through the Twinspace. 	<p>her two French lessons per week to eTwinning, ensuring the same curriculum content is covered as in conventional lessons</p> <ul style="list-style-type: none"> In the last year, pupils have been separately assessed for eTwinning activities, the results of which contribute towards their final grade. 	<p>show more interest</p> <ul style="list-style-type: none"> No teachers at the school have attended any professional development or other eTwinning events, apart from a workshop three years ago which initiated their interest 	<p>motivation and on learning</p> <ul style="list-style-type: none"> Recent exam results suggest these pupils are actually doing better than their counterparts in other classes who are not doing eTwinning activities. 	<p>to encourage others to get involved.</p>	<p>recent change in school management so their attitudes to international collaboration are not yet known</p>	<p>coordinator views eTwinning as a stepping stone to Comenius school partnerships and other international projects.</p>
Poland 1	<p>Primary school</p> <p>Pupils in projects: 6-13 years old</p>	<ul style="list-style-type: none"> All pupils have been involved in eTwinning projects Activities in class are more interactive, leading to higher motivation, more speaking and listening opportunities and better average grades in English 	<ul style="list-style-type: none"> eTwinning activities are primarily conducted in English lessons ICT is integrated into eTwinning projects Recent projects have also included other subjects, such as science and nature 	<ul style="list-style-type: none"> Teachers report improved job satisfaction eTwinning contributes towards progress in professional teaching grading Two eTwinning teachers have participated in an online eTwinning course; there has been no other attendance at 	<ul style="list-style-type: none"> Ways of teaching English have become more active and interesting ICT is integrated into English lessons 	<ul style="list-style-type: none"> Three English teachers (including a trainee) and the nature teacher have been involved in projects The head teacher is supportive of all activities Information on eTwinning is shared with all teachers in the school, as well as with parents and 	<ul style="list-style-type: none"> eTwinning is primarily about language learning, but all members of the school recognise its positive impact on cultural exchange eTwinning activities are ongoing and a Comenius school partnership started this year 	<ul style="list-style-type: none"> Teachers are provided with small financial rewards and eTwinning contributes towards professional grading The image of the school has improved because of European projects; it is now seen as more active and modern

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				events or contact with ambassadors or the NSS.		the local authorities		by prospective parents
Poland 2	Lower secondary school Pupils in projects 13-16 years old	<ul style="list-style-type: none"> Pupils are actively involved in projects and input into the planning processes They are responsible for the administration of the Twinspace and project webpage They chat directly with partner schools and have established their own Facebook page 	<ul style="list-style-type: none"> The eTwinners are language and biology teachers, so language is an important focus of projects but not the only one Projects are cross-curricular and include a range of subjects and topics ICT is integrated into eTwinning projects, including new tools and equipment Most eTwinning activities are extra-curricular and take place after school 	<ul style="list-style-type: none"> Three teachers are engaged in eTwinning, though one is new to the projects Two teachers have benefited professionally: one is an Honorary Ambassador and both contribute to eTwinning meetings and workshops in Poland and other countries Benefits also include job satisfaction and improved language and ICT skills 	<ul style="list-style-type: none"> Pupils enjoy a range of activities, which are more diverse and active than conventional lessons There is more integration and increased use of ICT in eTwinning lessons New equipment has been bought for the school as a result of an eTwinning workshop attended by a teacher 	<ul style="list-style-type: none"> The head teacher, other teachers and parents are kept informed of eTwinning activities The school is open to new projects and initiatives, especially around Europe and ICT 	<ul style="list-style-type: none"> The mission and planning of the school reflect a commitment to international collaboration projects The school has been involved in eTwinning since 2005, and has new projects every year The school has also taken part in a number of other international projects such as Comenius school partnerships and Youth in Action 	<ul style="list-style-type: none"> One of the eTwinners is an Ambassador and another an Honorary Ambassador for eTwinning in Poland Teachers receive a small annual bonus from the head teacher for eTwinning work The status of the school is improving because of its participation in a wide range of projects, which is communicated to the outside world
Poland 3	Primary school Pupils in projects 7-10 and 11-12	<ul style="list-style-type: none"> Pupils participate in eTwinning on a voluntary basis as an after school activity Most of the activities involve 	<ul style="list-style-type: none"> eTwinning activities are extra-curricular and after school The strongest curriculum links are with English 	<ul style="list-style-type: none"> Two teachers are involved, one is the school librarian The teachers are not driven to develop their careers further, but 	<ul style="list-style-type: none"> eTwinning brings new and innovative ways of working with the children The first time either teacher used ICT in teaching was 	<ul style="list-style-type: none"> The teachers, head teacher and parents are kept informed of activities There is little interest in getting 	<ul style="list-style-type: none"> Currently, there are no other international collaboration projects, and there is little motivation in the school to 	<ul style="list-style-type: none"> Teachers receive a small, twice-yearly bonus from the head teacher Little status, recognition or support is given to

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	years old	sharing photos and emails about themselves and things they have done	and ICT	gain satisfaction from new ways of interacting with the children • They have developed their English and ICT skills	during a project • There is little wider impact on teaching practice or the school	involved amongst the other teachers • The teachers receive little support	expand the eTwinning activities • International cooperation is perceived by the some people in the school as the role of the English teachers, who are too busy to take on extra responsibilities	the teachers or the projects • Parents are aware of projects, but there is no evidence of others outside school being informed or engaged
Romania 1	Combined primary and secondary school Pupils in projects 8-12 years old	<ul style="list-style-type: none"> • Pupils between 8-12 years old are engaged in the project • They have some autonomy in choosing research topics • Pupils work independently or in small groups on projects and tasks 	<ul style="list-style-type: none"> • eTwinning covers various curriculum areas • ICT teaching is embedded in project work • Projects are cross-curricular 	<ul style="list-style-type: none"> • None of the teachers has attended any training on eTwinning • Teachers report benefits to their project-management and ICT skills and cultural learning 	<ul style="list-style-type: none"> • Relationships between teachers and pupils are more equal in project work • eTwinning projects encourage independent learning and pupil-driven work 	<ul style="list-style-type: none"> • The Director is the coordinator and driver of eTwinning; three other teachers are involved and there is an eTwinning panel • The school hopes to expand eTwinning activities to other teaching colleagues in future 	<ul style="list-style-type: none"> • The Director is very enthusiastic about international collaboration • eTwinning projects have been successful and have led to the initiation of new projects 	<ul style="list-style-type: none"> • Parents and school managers recognise eTwinning as a positive influence • There is no official recognition or status for teachers participating in eTwinning activities
Romania 2	Secondary vocational school Pupils in projects 14-17	<ul style="list-style-type: none"> • Pupils worked in school teams, collaborating with pupils within their school and the partner schools • Pupils found 	<ul style="list-style-type: none"> • The projects incorporated ICT and language learning • The projects were cross- 	<ul style="list-style-type: none"> • Projects put a lot of pressure on teachers' time; they had to do a lot of work in their own time • Challenge of little 	<ul style="list-style-type: none"> • Teachers felt they used more open and creative teaching methods in eTwinning projects • There were some 	<ul style="list-style-type: none"> • Already a strong culture of collaboration in the school • Non-eTwinning teachers were kept informed about the 	<ul style="list-style-type: none"> • European cooperation is embedded into the mission of the school • The school has a number of on- 	<ul style="list-style-type: none"> • There is no official recognition or award scheme for teachers involved • The whole school is supportive of

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	years old	lessons more flexible and open, and felt there was improved interaction with their teacher	curricular <ul style="list-style-type: none"> • There has been discussion of adding extra-curricular activities, but this has not taken place yet 	access to, or skills in, ICT, and a lack of training and support in this area	reports that the content was too simple for the level of the students	projects <ul style="list-style-type: none"> • The head teacher was encouraging and keen on European collaboration 	going European activities <ul style="list-style-type: none"> • An application has been submitted for a new Comenius school partnership project 	European projects <ul style="list-style-type: none"> • There is a belief that such projects give the school special status
Romania 3	Secondary vocational school Pupils in projects 14-18 years old	<ul style="list-style-type: none"> • Around 100 pupils aged 14-18 years old participate in eTwinning • Pupils have autonomy over the focus of projects and guide their own learning processes • Pupils feel that they are consulted by their teacher on project decisions • They receive recognition from the school for participation in eTwinning projects 	<ul style="list-style-type: none"> • There is a cross-curricular approach, which covers foreign languages, science, geography and European studies • ICT is integrated into all projects 	<ul style="list-style-type: none"> • Teachers report improved foreign language and ICT skills, better understanding of other cultures and European perspective • A lack of training was noted but there was little motivation to attend NSS trainings because they don't reward teaching credits • Teachers expressed a need for an online sharing space exclusively for teachers 	<ul style="list-style-type: none"> • There is little reported impact on teaching attitudes and methods per se, but ICT is now integrated into the learning process • Teachers involved in eTwinning enjoy the less formal approach to learning that is embedded in these projects 	<ul style="list-style-type: none"> • The head teacher is not a member of eTwinning, but is very enthusiastic and supportive of the activities • Two teachers are involved in eTwinning, others are not interested in getting involved • The head teacher makes strenuous efforts to promote eTwinning to parents and the local community through the media and the local mayor 	<ul style="list-style-type: none"> • The school has a strong interest in European collaboration and currently holds the national title of 'European school' • Pupils take part in various activities, including Comenius school partnerships, Grundtvig and Youth in Action 	<ul style="list-style-type: none"> • Participation in eTwinning projects can contribute towards the merit scheme for teachers • Other European projects, particularly those which include advantages such as travel, hold a higher status among the teachers

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Sweden	Combined primary / lower secondary school Pupils in projects 7-16 years old	<ul style="list-style-type: none"> All of the pupils have been involved in eTwinning during their school career Pupils are not engaged in decision making on projects, themes and activities Pupils tend to work as a group and collaborate with each other on projects 	<ul style="list-style-type: none"> eTwinning is integrated into English and art lessons, though not in official school plans The new project shows an increase in cross-curricular work The main learning gains are in foreign language (English) ICT is already strong part of school ethos and at a high standard 	<ul style="list-style-type: none"> There are benefits for a small school in communicating with other teachers for professional development Teachers feel they have improved job satisfaction and new skills e.g. in ICT Personal benefit gains such as new friends and widened cultural perspective are also important for teachers 	<ul style="list-style-type: none"> The head teacher does not see a change in methodological approaches Teachers report better use of ICT in teaching and an increase in pupil group work 	<ul style="list-style-type: none"> The eTwinning Coordinator is the instigator and leader of all eTwinning activities, with very little support from the school leadership or management Other teachers have supported projects but remain reluctant to take a leading role Collaboration between teachers is increasing, however, e.g. the new climate change project is shared between two teachers 	<ul style="list-style-type: none"> Local authority and school management do not recognise the value of international cooperation There is enthusiasm within the school for international collaboration because of eTwinning, which has led to a Comenius school partnership application There is some hope that international work will lift the school status 	<ul style="list-style-type: none"> There is no recognition of teachers who engage in eTwinning work; the extra work has to be conducted in their own time eTwinning is sustained by the enthusiasm and dedication of one teacher There is little outside recognition of the international collaboration work, such as with parents or local authorities
UK England	Primary school Pupils in projects 4-11 years old	<ul style="list-style-type: none"> All pupils are involved in eTwinning, starting a new country partnership each new year There is little pupil participation in decisions about 	<ul style="list-style-type: none"> eTwinning is fully integrated into the curriculum and into activities and topics already going on in the school Specific curriculum focus 	<ul style="list-style-type: none"> One teacher coordinates eTwinning and is in control of finding partners for all classes The Coordinator is the only one who interacts with the 	<ul style="list-style-type: none"> eTwinning is integrated into current teaching practices and hasn't changed methodologies and pedagogy Pupils enjoy the levels of group and 	<ul style="list-style-type: none"> There is a whole school approach which is centrally coordinated and managed, ensuring regular activities and sharing with partners by all classes 	<ul style="list-style-type: none"> There is a strong international focus at the school, an international policy, language teaching and events to celebrate different cultures eTwinning has 	<ul style="list-style-type: none"> The school leadership instigated the eTwinning initiatives and continues to drive the international agenda, despite a change in school

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		activities, but some flexibility within a task <ul style="list-style-type: none"> • Direct pupil to pupil interaction occurs in some classes, but this is often not possible. • Pupils often work in groups or with partners when doing eTwinning activities 	depends on the class, but literacy and art are covered by every project	eTwinning site or who has received any training <ul style="list-style-type: none"> • Teachers incorporate eTwinning into normal lessons: they do not identify direct benefit to professional development, but enjoy eTwinning and see its advantages for the pupils 	partner work during eTwinning activities	<ul style="list-style-type: none"> • There is no collaboration between classes on activities – each carries out their own activities with a different partner 	had an impact on cultural understanding for pupils, teachers and parents	head recently <ul style="list-style-type: none"> • The Coordinator is recognised in terms of her title, but is not provided with extra time or incentives to carry out this role • All teachers are involved in eTwinning as part of their normal teaching
UK Northern Ireland	Special needs school Pupils in projects 3-19 years old	<ul style="list-style-type: none"> • eTwinning is used as a communication tool for a Comenius school partnership. All pupils in the school participate in the partnership • No pupils are registered on the eTwinning website and they don't interact directly with the Twinspace 	<ul style="list-style-type: none"> • The project covers areas of art and citizenship through cultural exchange • Activities are integrated into lessons and normal teaching time 	<ul style="list-style-type: none"> • Teachers, teaching administrators and support workers all benefit from travel and engaging with the Comenius school partnership project • Teachers identify little direct benefit from eTwinning • The Twinspace facilitates communication and sharing across all partners 	<ul style="list-style-type: none"> • No impact from eTwinning on teaching methodologies has been identified, and eTwinning activities tend to take place between teachers outside of the classroom 	<ul style="list-style-type: none"> • Teachers collaborate on Comenius school partnership activities • eTwinning activities are conducted mostly by the Principal, but other teachers are also registered on the Twinspace and get involved in activities 	<ul style="list-style-type: none"> • There is a strong European approach in the school and Comenius school partnerships have been running there for many years • There are plans to continue Comenius school partnerships in the coming years and eTwinning will now be an integral part of that 	<ul style="list-style-type: none"> • Teachers incorporate Comenius school partnership activities into their normal timetable; there is no special recognition for this

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UK Scotland	Primary school Pupils in projects Ages 8-11	<ul style="list-style-type: none"> • All pupils in the school engaged with international projects, older classes involved in eTwinning • Older pupils registered to the Twinspace and could access it during lesson time • Attempts to communicate in real time through instant messenger were not possible, but pupils exchanged information through blogs and messages • Some pupil participation in decision making about activities within a topic 	<ul style="list-style-type: none"> • Integrated into ICT lessons for older pupils, which are held once a week • Health studies and social studies covered by the topics and activities in the Comenius project 	<ul style="list-style-type: none"> • Professional development recognised by teachers in regard to Comenius school partnerships, but not eTwinning • Incorporation into teaching time, doesn't take up extra resources 	<ul style="list-style-type: none"> • A more interactive way to teach ICT and for the pupils to communicate directly with each other • No other reported changes in methodologies 	<ul style="list-style-type: none"> • Comenius school partnerships and eTwinning run centrally and all teachers involved • Some activities run as a whole school, but no specific examples of cross-class collaboration between teachers 	<ul style="list-style-type: none"> • Strong international cooperation aspect to the school for many years, including Comenius school partnerships for the last 10 years • eTwinning and other Comenius work has been put on hold this year due to competing priorities and to give the school time to adjust to changes in the curriculum: there are plans to begin projects again in the next school year 	<ul style="list-style-type: none"> • Teachers teach eTwinning as a part of their normal teaching time • More training and continuous professional development suggested for the future to get more out of eTwinning – one teacher has already attended a training this year

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