



eTwinning works for pupils

This brochure summarises the main findings of the Impact Study on Pupils' Key Competences with eTwinning. It presents scientific evidence on key competence development, together with practical tools for schools and European stakeholders. Pupils in eTwinning classes showed stronger competence development than similar pupils in non-eTwinning classes across all five competences studied.

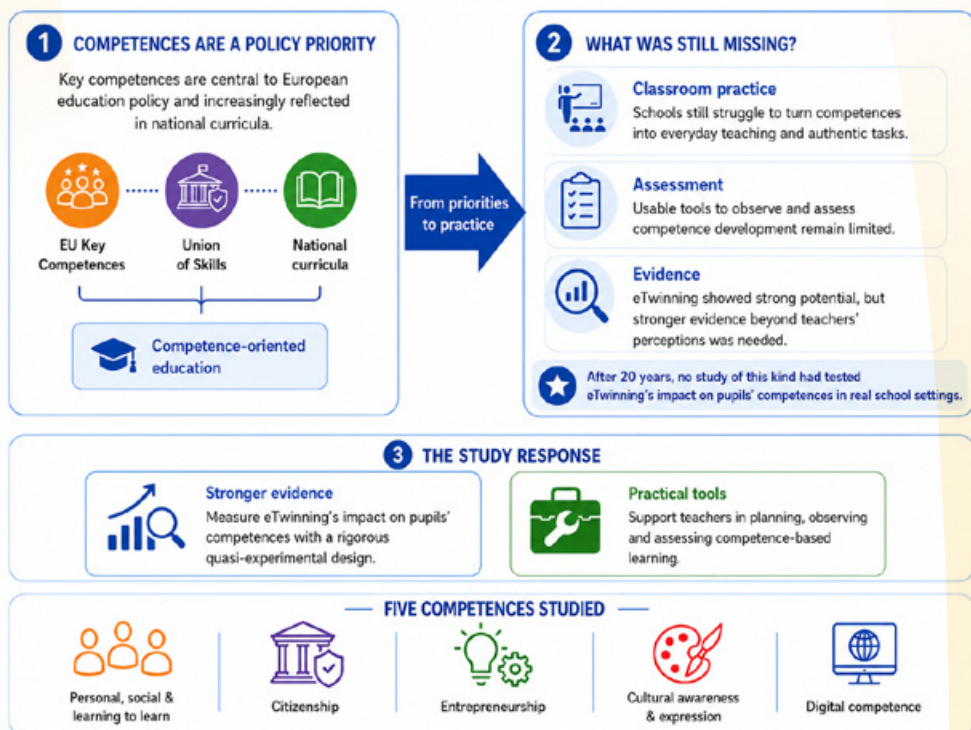


From teachers' conviction to robust evidence

Why now?

From 20 years of practice to stronger evidence

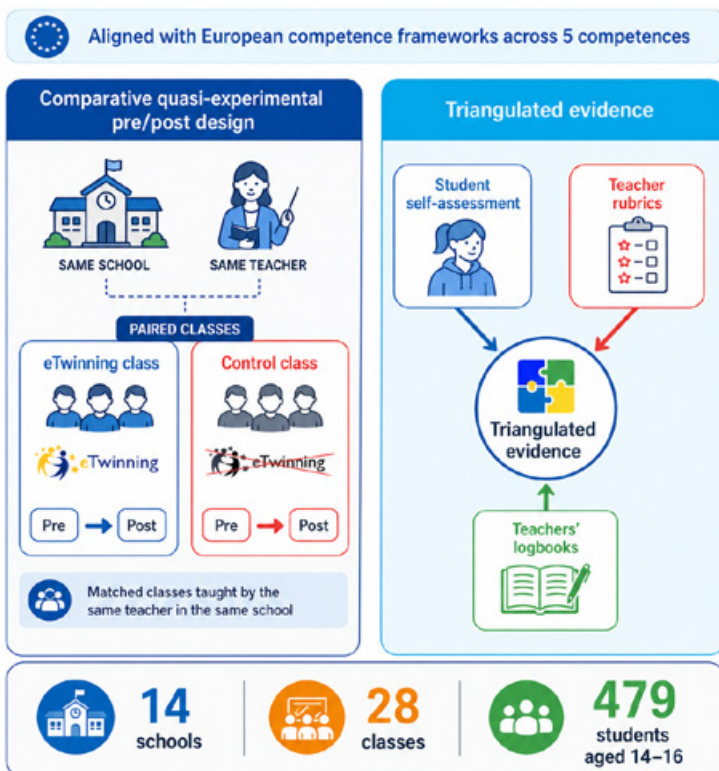
Key competences are now central to European education policy and increasingly embedded in national curricula. Yet schools still face challenges in turning competence-based education into everyday classroom practice, authentic learning tasks and usable assessment. After 20 years of eTwinning, stronger evidence was needed to move beyond teachers' perceptions and demonstrate its impact on pupils' key competences in real school settings. This study addressed both needs: measuring eTwinning's impact through a quasi-experimental design and developing practical tools to support competence-oriented teaching and assessment.



How we studied impact

A rigorous design in real school conditions

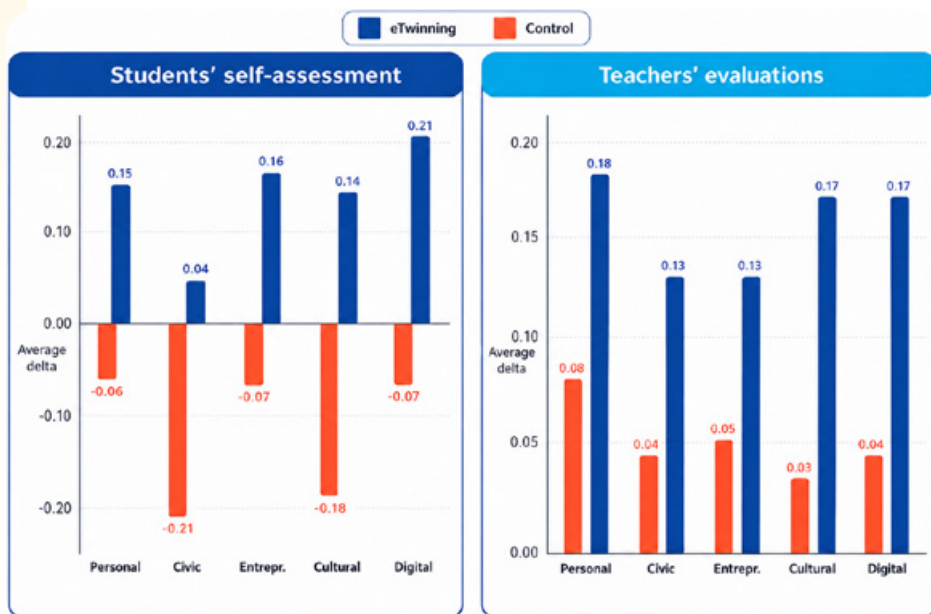
The study combined methodological rigour with real-school feasibility. Instruments were aligned with European competence frameworks, ensuring coherence, transparency and comparability across all five competences. It used a comparative quasi-experimental pre/post design, with eTwinning classes matched to control classes taught by the same teacher in the same school, helping reduce differences linked to teaching style and assessment practices while preserving authentic school conditions. Evidence was triangulated by combining three sources: student self-assessment, teacher rubrics and teachers' logbooks, giving a more complete picture of pupils' competence development.



What we found

A consistent eTwinning advantage across all five competences

Across all five competences studied, the eTwinning group showed stronger development than the matched control group, in both student self-assessment and teacher evaluations. Digital competence shows the strongest average gain in student self-assessments ($\Delta \approx 0.21$), but all five competences favour eTwinning. In teacher evaluations, eTwinning gains are consistently higher across all five competences, usually around $\Delta \approx 0.17$ - 0.18 , compared with roughly $\Delta \approx 0.03$ - 0.08 in the control group.



Reading the scale

Delta values express average movement on the A1–D2 proficiency scale.

Example

Personal, Social and Learning to Learn

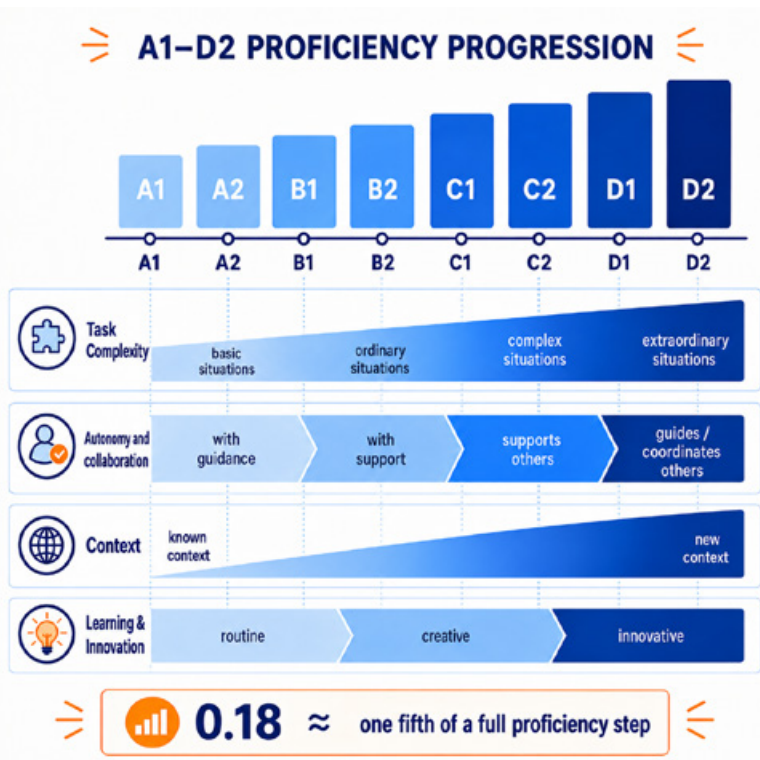
teacher-rated gain = 0.18

around one fifth of a full proficiency step.

Why these results matter

How to read competence growth

In this study, impact is read as movement along structured proficiency levels, not as a simple raw score. Competence development is a gradual, lifelong process: the study therefore used an 8-level scale grouped into four broad bands, A–D, aligned with DigComp's logic and applied consistently across the five competences analysed. The scale reflects growth along four dimensions: task complexity, autonomy and collaboration, transfer to new contexts, and learning and innovation. From this perspective, a gain such as 0.18 in teacher-rated Personal, Social and Learning to Learn can be seen as a meaningful shift – roughly one fifth of a full proficiency step – within a much longer developmental trajectory.



Project quality strengthens impact

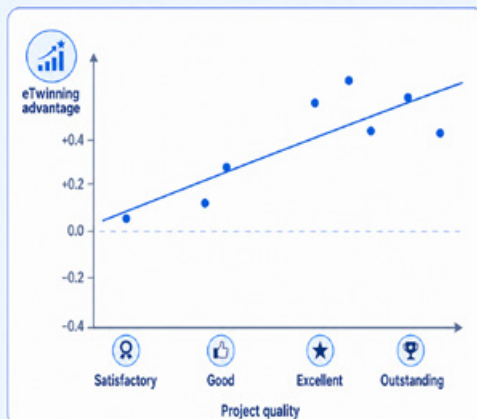
Good projects create better conditions for competence growth

Higher project quality is associated with a stronger eTwinning advantage in pupils' competence development. Across schools, projects assessed as stronger in their pedagogical quality, based on project documentation and external review (eTwinning Quality Label evaluation), tend to coincide with larger differences between eTwinning and control groups.

This does not mean that project quality is the only factor behind the results. However, it reinforces a practical insight: when eTwinning projects are intentionally designed and pedagogically coherent, they create more favourable conditions for competence development.

PROJECT QUALITY STRENGTHENS IMPACT

Better projects tend to generate stronger outcomes



Higher-quality projects tend to be associated with a stronger eTwinning advantage.



WHAT STRONGER PROJECTS TEND TO COMBINE

Quality features associated with stronger competence development



Structured collaboration



Student agency



Curricular integration



Purposeful use of digital technologies



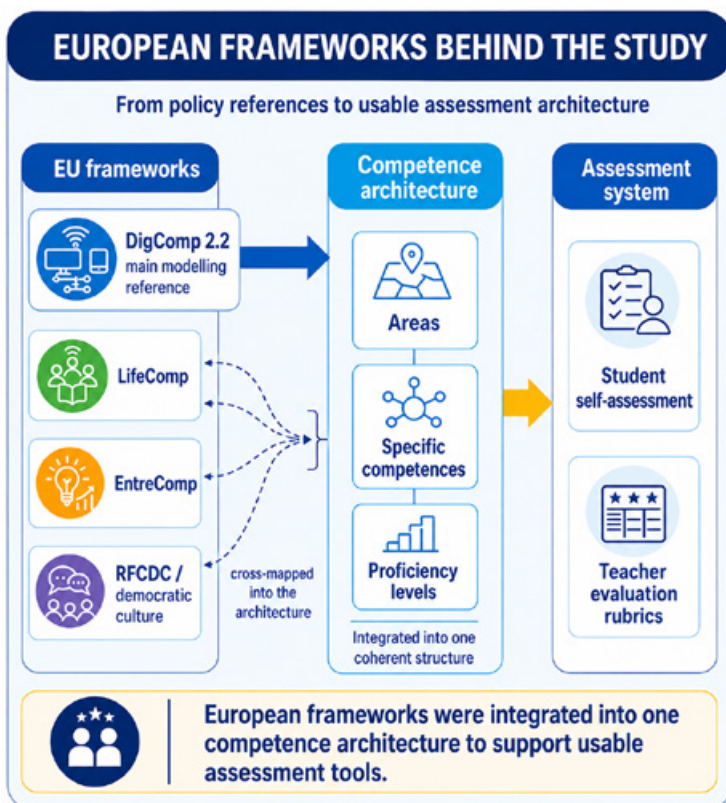
Reflective practices



European frameworks behind the study

From European frameworks to a usable assessment structure

Before measuring pupils' competences, the main European competence frameworks were mapped and integrated to ensure policy alignment and coherence across the study. DigComp 2.2 provided the clearest operational model, while LifeComp, EntreComp and RFCDC were cross-mapped and reorganised to build a coherent assessment structure. The result was a structured system of areas, specific competences and proficiency levels, usable for student self-assessment and teacher evaluation.



The competence structures produced

A major output of the study

For the four competences without an existing ready-to-use structure, the study developed clear frameworks aligned with A1–D2 proficiency levels. Each competence is broken down into three to five areas, articulated into observable specific competences. Together with DigComp 2.2, these frameworks provide a comparable basis for observation and assessment across all five competences.



1 COMPETENCE 1 - PERSONAL, SOCIAL AND LEARNING TO LEARN

1.1 PERSONAL

- 1.1.1 Self-awareness and self-efficacy
- 1.1.2 Self-regulation, resilience and well-being
- 1.1.3 Flexibility and adaptability
- 1.1.4 Motivation and perseverance
- 1.1.5 Initiative and uncertainty management

1.2 SOCIAL

- 1.2.1 Communication skills
- 1.2.2 Critical thinking and problem solving
- 1.2.3 Learning from experience and opportunities

1.3 LEARNING TO LEARN

- 1.3.1 Management of learning and learning gaps
- 1.3.2 Creative and systems thinking
- 1.3.3 Reflective thinking and evaluation



2 COMPETENCE 2 - CITIZENSHIP

- 2.1 Digital citizenship
- 2.2 Social values and attitudes
- 2.3 Civic skills and engagement



3 COMPETENCE 3 - ENTREPRENEURSHIP

- 3.1 Ideas and opportunities
- 3.2 Resource management
- 3.3 Turning ideas into action



4 COMPETENCE 4 - CULTURAL AWARENESS AND EXPRESSION

- 4.1 Creative expression
- 4.2 Cultural values and ethics
- 4.3 Cultural awareness

REFERENCE FRAMEWORK

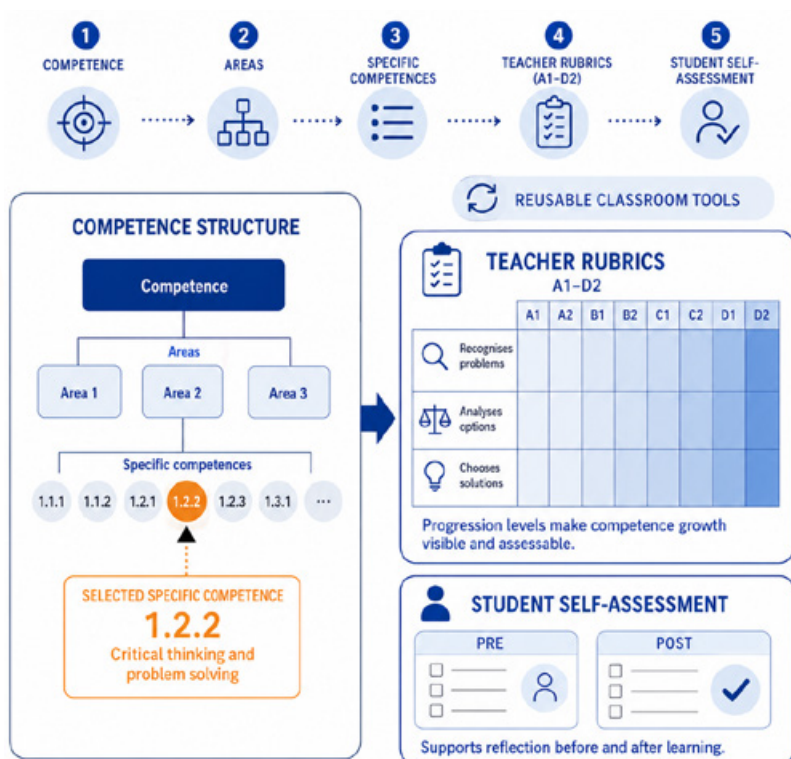
DigComp structure

- 1 Information and data literacy
- 2 Communication and collaboration
- 3 Digital content creation
- 4 Safety
- 5 Problem solving

From framework to classroom tools

What teachers can use directly

The competence structure was turned into practical classroom tools ready for use. For each specific competence identified within the broader structure, a teacher rubric was developed and organised through A1–D2 proficiency levels, helping make competence growth more visible and assessable. Student self-assessment tools were also developed to support pre/post reflection and comparison.



Use tomorrow in class!



Practical. Visible. Meaningful.

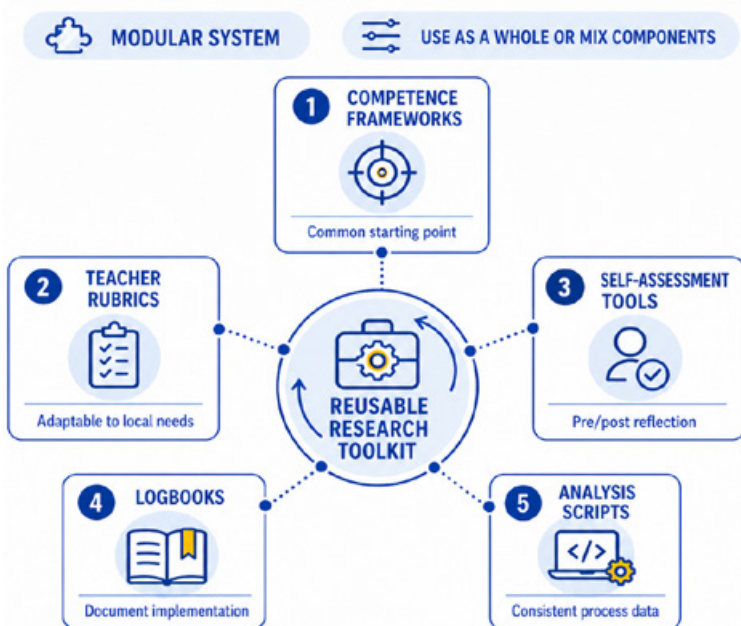
A reusable toolkit for Europe

From one study to a transferable research toolkit

Beyond their value for classroom use, the tools developed for this study form a broader and reusable research toolkit.

Other eTwinning National Support Organisations (NSOs) and researchers can reuse the competence frameworks as a common starting point, adapt the rubrics and self-assessment tools to local needs, and use the logbooks and analysis scripts to document implementation and process data consistently.

Used in this way, the tools can also help generate more comparable evidence across countries, progressively strengthening a shared European understanding of how eTwinning supports competence development.



Messages for key stakeholders

From evidence to action: a shared responsibility

This research shows that eTwinning can support key competence development and that moving from evidence to action requires the contribution of different stakeholders.



1 Teachers & school leadership

Make competence work visible and credible

- Make eTwinning and competence-oriented work more visible in school
- Use eTwinning as a structured pathway into competence-based teaching
- Support shared assessment practices and professional learning



2 NSOs / CSS / EACEA / European support structures

Scale what works, keep it usable

- Collaboratively review the tools at European level
- Refine and simplify them where needed
- Disseminate revised versions through European channels
- Keep classroom usability at the centre



3 European Commission

Build on evidence, frameworks and tools

- Promote eTwinning as a credible lever for key competences
- Support stronger dissemination and more comparable evidence across countries
- Encourage the further development of practical tools for teachers



Evidence should not remain national.
It should become a shared European resource.

eTwinning works for pupils

Evidence. Tools. Impact.



Explore the full research

Scan the QR code to read the complete publication in Italian and access research materials and downloadable resources.



<https://etwinning.indire.it/ricerca/etwinning-e-lo-sviluppo-delle-competenze-degli-alunni/>



Contact us



Unità nazionale eTwinning /
Agenzia nazionale Erasmus+ INDIRE
Via C. Lombroso 6/15 - 50134 Firenze



Mail: etwinning@indire.it