

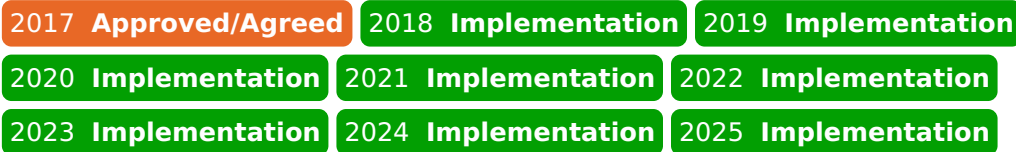
Digital competence framework for teachers

POLICY DEVELOPMENT

PRACTICAL MEASURE/INITIATIVE

 SPAIN

Timeline



ID number 28198

Background

The LOMLOE, approved at the end of 2020, which updates the Organic Act 2/2006, entrusts the education ministry to draw up and review, after consulting the Autonomous Communities, the reference frameworks for digital competence guiding initial and continuous teachers training and fostering the development of schools and classrooms digital culture.

The adoption by all education administrations of a framework of digital competence in teaching and its continuous updating will provide a shared reference point for the design of teacher training activities that enables improving their performance and adaptation to continuous technological changes.

Objectives

To promote teacher training in the technological, methodological and social aspects of integrating digital resources into their daily teaching practice.

Description

The Ministry of Education and Vocational Training, through the National Institute of Educational Technologies and Teacher Training and the Autonomous Communities, elaborated, in 2021, a new reference framework for digital competence in teaching through a commission dependent on the Working Group on Learning Technologies. This framework was approved by the Sectoral Conference on Education at its meeting on 30 March 2022 and published by Resolution of 4 May 2022 of the Directorate General for Evaluation and Territorial Cooperation. The framework currently in force replaces the one approved by the Sectoral Conference in 2020, which was made in 2017 by adapting the European framework for digital competence of citizenship (DigComp) to the teaching profession.

Unlike the previous one, the new reference framework for digital competence in teaching develops the specific digital competences required in the exercise of the profession. It adapts the European framework of digital competence for educators (DigCompEdu) to the

Spanish context of formal education. As a differentiating element, it is worth noting the application of the different phases of professional development as a criterion for establishing the different levels of progression, the starting point of which is sufficient preparation in this area for the exercise of the profession. The 2022 framework also incorporates regulatory aspects of protecting minors and personal data in digital environments. This framework applies to all subjects teachers covered by the Organic Act on Education and, therefore, also to those who teach Vocational Education and Training.

Since 2017, the National Institute for Education Technologies and Teacher Training (INTEF) has developed a line of work and continued collaboration with the Seville Joint Research Centre of the European Commission, to foster the use of the SELFIE tool, designed to help schools integrate digital technologies into teaching, learning and student assessment, as well as design a digital education plan which responds to previously detected needs (these initiatives are linked to action 5 in priority 1 of the Digital education action plan of the European Commission). SELFIE has been piloted since October 2018 in schools.

INTEF is also running the Spanish National Support Service eTwinning actions that promote collaboration and exchanges between teachers and students from different countries (and at national level) and offer more digital resources and professional development activities for teachers (including support for teachers, dissemination actions, etc).

2017 Approved/Agreed

2018 Implementation

2019 Implementation

The education authorities at State and regional level are discussing the use of the Digital competence framework for teachers as an instrument to design policies aimed at improving the digital competence of teachers, mutual recognition among education authorities of the certifications (to be) created as well as to review the framework periodically. This inter-administrative agreement may lead to a legal publication in the form of a Resolution.

In early November, it was decided to review the Digital competence framework for teachers as a result of the work and regulatory changes that have occurred since its publication, such as the EU Council Resolution of May 22, 2018 on Key Competences, the interconnected model of the DigComp, DigCompEdu and DigCompOrg frameworks developed by the Joint Research Centre of the European Commission and to comply with Organic Act 3/2018 on protection of personal data and guarantee of digital rights.

The pilot for the Digital competence portfolio for teachers ended in 2018 and evaluation of its technical aspects and of the viability and sustainability of the project began in 2019. This evaluation is expected to finish in 2020 and is intended to serve as a basis for its improvement.

In April 2019, a first SELFIE forum Teaching and learning in the digital age was organised by the European Commission in partnership with the Ministry of Education in Madrid.

In February 2019, a pilot project to obtain national indicators in all SELFIE areas for Spanish schools is being run by INTEF; results are expected in the second half of 2020. The national pilot project is being carried out through collaboration between INTEF, Evaluation Institute of the Ministry of Education (INEE) and the regions; this sample study aimed to serve as a reference for schools that use SELFIE to ascertain their degree of digital development in relation to the national standard.

The Second survey of schools: ICT in Education was carried out and several MOOCs on the SELFIE tool created:

- (a) second edition of the MOOC Digitally competent education organisations (in Spanish and English) from April to May;
- (b) first edition of the MOOC Design the digital plan for your school, from November to December.

There are 5 325 active eTwinning Spanish projects, 14 993 registered Spanish schools in eTwinning and more than 64 000 registered Spanish teachers. The Spanish National Support Service for eTwinning developed several actions and activities focused on the involvement of VET teachers and schools in eTwinning, including dissemination activities held in VET schools, a presentation in the VIII National Ambassadors Meeting, a webinar for VET schools and teachers, in addition to the regular dissemination of VET news, articles, actions, good practices, VET eTwinning projects and events through social networks. Other means of dissemination include the creation of VET activities ready to use in class, or video-animation focused on VET in eTwinning. Relevant training activities took also place:

- (a) INTEF-tutored online course: eTwinning and VET;
- (b) organisation of the face-to-face training event: Bilateral training event Spain-France for VET teachers;
- (c) a learning event about VET, designed and taught by a Spanish teacher in collaboration with the Spanish National Support Service;
- (d) an eTwinning Group for VET Education at national level has been set up to promote VET in eTwinning.

The General Secretariat for VET designed different courses related to the updating and acquisition of competences in digitalisation for teachers of VET. These courses are expected to be implemented in 2020 in collaboration with the main technological companies working in Spain.

2020 Implementation

One of the objectives of the first strategic plan for vocational training in the education system 2019-22 is to design, develop and consolidate a single vocational training system that will make vocational training a fundamental pillar of the country's economic development and social welfare. This plan consists of nine axes, broken down into 16 strategic objectives and 45 lines of action.

Within the framework of axis 1 (collaboration and participation of companies and openness to the participation bodies of all sectors), axis 2 (streamlining the response from vocational training to the qualification needs of each productive sector), and axis 7 (training of VET teachers associated with the productive sectors) different training sessions organised with the company Siemens aimed at preparing VET teachers for the specialisation courses on intelligent manufacturing, established by Royal Decree 481/2020, and on digitalisation of industrial maintenance, established by Royal Decree 480/2020.

The plan for the modernisation of VET (2019-23) foresees training actions for over 50 000 VET teachers in public schools, with a 30-hour training module on digital competences.

The Digital competence framework for teachers is being revised to align it with:

- (a) the education law of December 2020 (LOMLOE), which amends law 2/2006;
- (b) the strategic priorities and actions of the European Commission's Digital education action plan for 2021-27, including the publication of common guidelines for teachers and educators to promote digital literacy and tackle misinformation, the planned update of the Digital citizenship competence framework (DigComp) and the creation of a European certificate of digital competences;
- (c) the publication of a European roadmap for the development of teacher professional competence frameworks by member countries, scheduled to be published by the European Commission in 2021-22, as indicated in its Communication *Achieving the European education area by 2025*, of 30 September 2020;
- (d) the needs arising from the COVID-19 pandemic to ensure inclusive and quality education for all students, many of which involve greater and better use of digital technologies in education.

Between November and December 2020, the second edition of the MOOC *Diseña el*

Plan Digital de tu centro was run and, also on 10 November 2020, the SPOOC with its English version, *Design your school digital plan* was opened for self-learning.

2021 Implementation

The reference framework for digital competence in teaching was updated in 2021, following the 2020 education sectoral conference agreement. The sectoral education conference is expected to approve it in 2022.

The third edition of *Design your school's digital plan* (MOOC) was held between October and November 2021. These training materials were published in the *ConectaTIC* digital education support space to serve as guidance for the development of the school's digital plan. The latter is part of #CompDigEdu, implemented within the framework of the Spanish resilience and recovery facility (component 19 - *Plan Nacional de Competencias Digitales*).

In July, the government also approved the distribution of more than EUR 18 million to the Autonomous Communities for teacher training in the use of interactive digital classrooms and further funding of EUR 11 947 200 in the 2021 budget for the programme for the improvement of digital competence in education #CompDigEdu, within the framework of component 19: the national digital competence plan of the recovery and resilience facility.

2022 Implementation

This Reference framework is being used to accredit the digital competence of teachers and define the necessary training. It aims to certify the digital competence of 80% of Spanish teachers by September 2024. Regarding accreditation, the education authorities agreed on common requirements and their recognition.

The new framework, currently in force, focuses on determining the digital competences used by teachers in the exercise of their profession and involves an adaptation of the digital competence framework for educators (DigCompEdu) to the Spanish context of formal education, unlike the framework developed in 2017, implying a substantial change.

The updated reference framework for teacher digital competence maintains the areas and competences, as well as the scale of 6 levels grouped into three stages to describe the development of these competences. Nevertheless, it shows significant differences with DigCompEdu. The most important of these are as follows::

- (a) a new competence has been added concerning the protection of personal data, privacy, security and digital well-being;
- (b) the competences of area 1, relating to professional development, have been completed to include such relevant aspects as participation in the projects and functioning of the school and coordination among its teaching teams;
- (c) the initial level of aptitude corresponds to the theoretical knowledge that must be possessed by any graduate whose training qualifies him/her to practise the profession. The remaining levels are characterised by the progression from the guided use of digital technologies in the school by a novice teacher to their autonomous and creative use, thanks to experience and continuous training; the last stage corresponds to a relevant performance for improvement in the school itself and, finally, to the development of research and models that can serve as a reference for the profession;
- (d) indicators of achievement have been developed for the levels of performance associated with each of the competences.

Finally, area 6 of the framework describes the pedagogical competences of teachers to develop students' digital competence. This is one of the key competences of the exit profile derived from the implementation of Organic Act 3/2020, of 29 December, which modifies Organic act 2/2006, of 3 May, on education, and regulated in Royal Decree 217/2022, establishing the organisation and minimum teaching of compulsory secondary education.

Since Basic Level VET is part of basic education, with primary and compulsory secondary education, this exit profile serves as the learners' ultimate competence reference, both for the assessment and for granting the compulsory secondary education qualification. Basic Level VET programmes will facilitate the acquisition of the competences established in the exit profile through teaching organised in the area of communication and social sciences, the area of applied sciences or the vocational area.

The development of this new curriculum has been coordinated by the Sub-Directorate for Academic Organisation and the different units of the Directorate General for Evaluation and Territorial Cooperation have participated in this task, including the National Institute of Educational Technologies and Teacher Training (INTEF), which has focused a significant part of its collaboration on the digital competence of students.

As a consequence of the change of framework and the technical limitations detected after its evaluation, the pilot project of the teachers' digital competence portfolio was closed.

The fourth edition of the MOOC *Design your school's digital plan* was held in September and October 2022.

The Spanish national support service for eTwinning developed several actions and activities focused on the involvement of VET teachers and schools in eTwinning. In addition to the regular dissemination of VET news, articles, actions, good practices, VET eTwinning projects and events through social networks, other means of dissemination include the creation of VET activities ready to use in class in eTwinning projects or video-animations focused on VET in eTwinning that have been published in online and disseminated through social networks. More specifically, a presentation about VET activities in eTwinning (good practices) was held in the VIII and IX National Ambassadors Meeting and a webinar for VET schools and teachers was also celebrated. Other relevant training activities have also taken place:

- (a) INTEF tutored online course: eTwinning and VET;
- (b) organisation of the face-to-face training events: Bilateral training events Spain-France for VET teachers held in Spain and France and multilateral training event in Spain with teachers from other countries;
- (c) a learning event about VET, designed and taught by a Spanish teacher in collaboration with the Spanish National Support Service;
- (d) online workshops organised by the central support service in Brussels;
- (e) an eTwinning group for VET education at national level was set up and is maintained actively to promote VET in eTwinning, where teachers have the opportunity to share good practice and create networks.

e-Twinning projects are also included in one of the lines of the plan for the digitalisation and digital competences of the education system which is one of Spain's NIP actions.

2023 Implementation

The publication of Royal Decree 659/2023, of 18 July, which developed the organisation of the vocational training system by the education ministry, plays a crucial role in advancing teacher training across technological, methodological, and social dimensions, enabling the integration of digital resources into everyday teaching practices.

Royal Decree 659/2023 introduced new modules in all intermediate and higher VET diploma programmes addressing key aspects of the current economy, such as digitalisation, and required teachers to be trained in those contents.

The education ministry published the order EFP/823/2023, of July 19, regulating the procedure for the accreditation of teaching digital competence.

The Digital competence framework for teachers was being used to accredit and certify teachers' digital competence.

2024 Implementation

The Ministry of Education, Vocational Training and Sports offered direct VET teaching training in digitalisation applied to the different productive sectors, aimed at teaching staff in VET diploma programmes or specialisation courses in specific productive sectors: artificial intelligence, cybersecurity, intelligent manufacturing, digitalisation of industrial maintenance, among others.

The MEFD distributed nearly EUR 5 million to the Autonomous Communities for training in digitalisation applied to the productive sectors. This training specifically targeted VET teachers, with 49 723 teachers participating.

The Digital competence framework for teachers was being used to accredit and certify teachers' digital competence.

2025 Implementation

The digital competence framework for teachers continued to be used to credit and certify teachers' digital competence. It is available in all co-official languages and accessible to all educational administrations in the autonomous communities, which have already regulated the framework for the accreditation of digital competence. A new call for the accreditation of digital teaching competence was launched on 1 October 2025. Certification remained voluntary, not mandatory.

Bodies responsible

- Ministry of Education and Vocational Training (until 2023)
- Ministry of Education, Vocational Training and Sports
- National Institute of Qualifications (INCUAL)

Target group

Education professionals

Teachers
Trainers
School leaders
Adult educators
Guidance practitioners

Thematic categories

Governance of VET and lifelong learning

Optimising VET funding

Modernising VET offer and delivery

Developing and updating learning resources and materials
Acquiring key competences

Teachers, trainers and school leaders competences

Systematic approaches to and opportunities for initial and continuous professional development of school leaders, teachers and trainers
Supporting teachers and trainers for and through digital

European priorities in VET

VET Recommendation

VET as an attractive choice based on modern and digitalised provision of training and skills

Osnabrück Declaration

Establishing a new lifelong learning culture - relevance of continuing VET and digitalisation

Subsystem

IVET

Further reading

[INTEF. ConectaTIC: a web support space for digital education](#)

[INTEF. updating of the reference framework for digital competence in teaching.](#)

[Order EFP/823/2023, of July 19, regulating the procedure for the accreditation of teaching digital competence, within the scope of management of the Ministry of Education and Vocational Training.](#)

[Call for the accreditation of digital teaching competence](#)

[Digital competence framework for teachers in all co-official languages](#)

Related policy developments

2025 Implementation

Online teaching material

In education authority VET, the education community can find and create structured teaching material ready to be downloaded and used by teachers and learners in Procomún, the Repository of open educational resources (OER) of the ministry, operated by the National Institute for Education Technolog

 SPAIN

Type of development

Practical
measure/Initiative

Subsystem

IVET

2025 Implementation

VET teacher training, upskilling and mobility

In December 2018, the Council of ministers approved EUR 8.6 million (three times the previous budget), jointly financed by the European Social Fund, for VET teacher training, upskilling and mobility.

 SPAIN

Type of development

Practical
measure/Initiative

Subsystem

IVET

2022 Completed

School of computational thinking and AI for teachers

The School of Computational Thinking was set up in the academic year 2018/19 to train teachers to develop programming and robotics in their classrooms.

 SPAIN

Type of development

Practical
measure/Initiative

Subsystem

IVET

2025 Implementation

Teacher training through digital environment

The National Institute of Education Technologies and Teacher Training (INTEF) is also responsible for the integration of ICT in non-university education.

 SPAIN

Type of development

Practical
measure/Initiative

Subsystem

IVET

2025 Implementation

Raising employability for ICT and the digital economy

There are multiple initiatives to raise the skills of young people and workers (employed or unemployed) in ICT and the digital economy. Different public bodies are involved, in some cases in partnership with industry.

Type of development

Practical
measure/Initiative

Subsystem

IVET CVET

“ ... ” **Cite as**

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