

# Teacher training through digital environment

POLICY DEVELOPMENT

PRACTICAL MEASURE/INITIATIVE

 SPAIN

## Timeline

|                     |                     |                     |
|---------------------|---------------------|---------------------|
| 2016 Implementation | 2017 Implementation | 2018 Implementation |
| 2019 Implementation | 2020 Implementation | 2021 Implementation |
| 2022 Implementation | 2023 Implementation | 2024 Implementation |
| 2025 Implementation |                     |                     |

ID number 28199

## Background

The quality of teaching practice is considered one of the key elements in achieving educational success for all students, which is why Article 102 of Organic act 2/2006, of 3 May, on Education, modified by Organic Act 3/2020, of 29 December, presents it as a right and a duty of teachers and establishes that educational administrations shall develop programmes for their permanent updating and adaptation, which shall include the use of information and communication technologies. Without prejudice to the transfer of educational competences to the Autonomous Communities and those attributed to the General Secretariat for Vocational Training, point 2 of Article 3 of Royal Decree 498/2020, of 28 April, which develops the basic organic structure of the Ministry of Education and Vocational Training, assigns these functions to the National Institute of Educational Technologies and Teacher Training. Specifically, teacher training in the use of digital technologies in teaching and learning processes is crucial to ensure that all students acquire the digital skills necessary for their full social and professional integration, which is one of the aims of the education system established in Article 2 of Organic Act 2/2006, of 3 May, on Education, modified by Organic Act 3/2020, of 29 December, and to guarantee the right to digital education stipulated in article 83 of Organic Act 3/2018, of 5 December, on the Protection of Personal Data and Guarantee of Digital Rights and which is also referred to in Article 33 of Organic Act 8/2021, of 4 June, on the comprehensive protection of children and adolescents against violence.

In addition to the ordinary programmes derived from the above, the educational policies linked to these objectives have been reinforced with measure 6 - Digitalisation and Digital Skills Plan for the Education System - included in line of action 3 of the national digital competence plan, which in turn develops the third strategic axis of the agenda Digital Spain 2025.

## Objectives

To train teachers in developing students' digital competences and in the appropriate use of digital technologies in teaching and learning processes, including those taking place in virtual environments, adapting the pedagogical strategies used accordingly.

To update, through digital media, the scientific, pedagogical and didactic training of teachers, as well as that relating to coordination, guidance, tutoring, inclusive education, attention to diversity, equality and the organisation and functioning of schools to improve the quality of education.

## Description

The National Institute of Education Technologies and Teacher Training (INTEF) is also responsible for the integration of ICT in non-university education. INTEF, in collaboration with the Autonomous Communities, offered four types of online courses for teacher continuous professional development (CPD):

- (a) online tutored courses specifically for teachers; these combine expert support and follow-up with peer-to-peer exchange, teamwork and peer assessment. Successful completion is recognised with an official digital certification;
- (b) massive open courses of varying duration: MOOC, with an estimated effort of 25 hours, and NOOC, with an estimated effort of 3 hours. They address topics of general interest to the education community and do not receive tutored follow-up, have a course facilitator and the evaluation is carried out among the participants themselves who, after passing, receive a digital badge;
- (c) self-training through SPOOC and the EduPills application for mobile devices with micro-training cards;
- (d) experimental projects that combine online training periods with those of application in the classroom. These projects are monitored to evaluate their impact on student learning. This is the case, for example, of the School of Computational Thinking and AI.

The education ministry, through INTEF, launched an Open badge backpack, the digital service currently used to issue badges based on the successful completion of INTEF's open massive online training.

### 2016 Implementation

### 2017 Implementation

### 2018 Implementation

### 2019 Implementation

In 2019 the online training modalities focused on a new objective, to integrate the needs and interests of the entire education community: strengthen the collaboration between teachers and families; disseminate institutional initiatives; raise awareness or train on topics of general interest (including the improvement and development of digital competence); support minors to improve their digital competences and adopt measures to make a safe use of the Internet. For tutored courses aimed only at teachers, two experts ensure that both the subject and digital competences are correctly implemented.

Most of the tutored courses were aimed at all teaching profiles, including those in VET. However, following priority lines set by the new Ministry for Education and Vocational Training (MEFP) regarding the promotion of VET models for innovation and employability, the courses Professional future were held during 2019; the main objective was to align teaching practice with European education policies and state of the art in this area. These courses were in the framework of the public call for places on network training courses for the continuing education of teachers working at pre-university levels, and the training course on the development of the management function, published at the end of 2018 to be implemented during 2019.

A new version of the course Vocational training: from educational policies to practice in the classroom, has been scheduled for 2020. Three face-to-face training activities also took place in the 2019 summer courses specifically aimed at VET teachers.

### 2020 Implementation

The first edition of the Vocational training: from educational policies to classroom practice course ran from March to May 2020 as part of the 2020 call for online tutored courses.

Due to the COVID pandemic and the need to give continuity through distance education to the teaching-learning process during the lockdown period, and to provide support to the different scenarios that would have to be faced during the 2020/21 academic year, the Ministry of Education and Vocational Training, through the INTEF, adopted the following measures regarding its training offer:

- (a) modification of the call for tutored courses by resolution of May 27, to offer six new specific courses on distance and online education;
- (b) selection of training materials and creation of a space for collaboration and answering teachers' questions on the web Resources for online learning. This environment was operational from 13 March to 22 October, 2020, when it was replaced by the ConectaTIC support space for digital education.

### **2021 Implementation**

On-line training activities for the professional development of non-university teachers, including vocational training teachers, continued to be offered, and the *ConectaTIC* digital education support website was kept up to date.

### **2022 Implementation**

In addition to the annual call for online tutored courses aimed at teacher training, a specific call was published for training on the new curriculum derived from Organic Act 3/2020, of 29 December, which modifies Organic Act 2/2006, of 3 May, on Education. This call was financed by the European Union through the Next Generation EU funds within the national recovery and resilience plan, associated with reform 2 of component 21. The training on this new curriculum affects the teachers who teach the common areas of the Basic level VET. The call consisted of 3 editions, in each of which the following courses were offered:

- (a) from the curriculum to classroom practice;
- (b) learning situations for the development of competences;
- (c) evaluation of competences through performance.

### **2023 Implementation**

In May 2023, the annual call for online tutored courses aimed at teacher training was published providing 5 600 places available, distributed over 22 courses.

### **2024 Implementation**

In April 2024, the annual call for online tutored courses aimed at teacher training was published, providing 6 750 places available and distributed over 14 courses.

In the field of VET, the General Secretariat for Vocational Training published a call for online courses for the training of teachers who teach vocational training grades D and E, in collaboration with the Naturgy Foundation. The courses were: sustainability applied to the production sector (introduction) and sustainability applied to the production sector (in-depth study).

A second call was issued on 28 November 2024, making 6 350 places available for online training courses.

### **2025 Implementation**

The 30-hour training course on sustainability for VET teachers developed in collaboration with the Naturgy Foundation, a member of the Alliance for VET was still ongoing. It consists of 21 hours of synchronous online sessions and 9 hours of

individual work.

The November 2024 call was resolved with 6 350 places. On 4 June 2025, the Ministry of Education issued another call for online professional development courses for teachers in publicly funded pre-university institutions, offering 8 350 places.

These training opportunities aimed to improve teachers' instructional methods and address current educational challenges through diverse, practical topics. Topics included artificial intelligence in learning design, personal data protection, affective-sexual education, school library management, wellbeing coordination, and climate emergency strategies. Additional courses offered focused on inclusive education (Autism Spectrum Disorder), eTwinning projects, online tutoring, virtual laboratories, creative writing, and updating management skills.

## 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

### Other

Please check target groups

## Thematic categories

### Modernising VET offer and delivery

Diversifying modes of learning: face-to-face, digital and/or blended learning; adaptable/flexible training formats

Developing and updating learning resources and materials

### 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

## Subsystem

IVET

## Further reading

[Available online courses](#)

[EduPills](#)

[Online learning resources](#)

---

[ConectaTIC](#)

---

[Organic Law 3/2018, of 5 December, on the Protection of personal data and the guarantee of digital rights. Consolidated legislation](#)

---

[National digital competence plan \(2021\)](#)

---

[Digital Spain 2025](#)

---

[2024 Annual call for online tutored courses](#)

---

[Vocational training course for employability in 'Sustainability applied to the production system'](#)

---

[Call for applications for competitive places on online training courses for the continuing professional development of teachers working at pre-university levels in publicly funded institutions. Second edition.](#)

## Related policy developments

---

**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

### Digital competence framework for teachers

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

 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.

 SPAIN

#### Type of development

Practical  
measure/Initiative

#### Subsystem

IVET CVET

---

---

## 2025 Implementation

### Strategic boost to VET

The new government, in power since June 2018, reorganised the administration. The change of name in the education administration state, now the Education and Vocational Training ministry (previously Education, Culture and Sports), reflects the new strategy to promote VET.

 SPAIN

#### Type of development

Strategy/Action  
plan

#### Subsystem

IVET CVET

---

“ ... ” **Cite as**

Cedefop, & ReferNet. (2026). Teacher training through digital environment: Spain. In Cedefop, & ReferNet. (2026). *Timeline of VET policies in Europe* (2025 update) [Online tool].

<https://www.cedefop.europa.eu/en/tools/timeline-vet-policies-europe/search/28199>