

Big data techniques for skills anticipation

POLICY DEVELOPMENT

PRACTICAL MEASURE/INITIATIVE

 SPAIN

Timeline

2017 Implementation

2018 Implementation

2019 Implementation

2020 Discontinued

ID number 28691

Description

The State Foundation for Training in Employment (Fundación Estatal para la Formación en el Empleo, Fundae) is testing big data techniques to improve skills anticipation and use them to design public training programmes in the short, medium and long term for the entire labour force.

A software tool is being developed to classify automatically the training actions (TTAA) that companies offer to their employees. To do this, automatic classification algorithms based on text mining are used to compare the textual information of the training actions, classifying them by adding an indicator of the accuracy of the task. It incorporates a novelty score for each TTAA that facilitates the identification of emerging trends in learning content. This functionality, in the development phase, is intended to allow adding new categories to be taken into account in future classifications of TTAA (automatic learning).

2017 Implementation

2018 Implementation

2019 Implementation

The new tender for the next step of this project after the first pilot experience was published in November 2018 and the contract ended in February 2020. Fundae is reviewing the product to check its compliance with the specifications and the feasibility of its implementation in the foundation's procedures.

2020 Discontinued

The tool developed for the classification of training actions is up and running and in use. The change of policies and strategies is driving skills anticipation through other paths.

Bodies responsible

- State Foundation for Training in Employment (Fundae) until 2022

Target group

Learners

Young people (15-29 years old)
Adult learners

Entities providing VET

VET providers (all kinds)

Thematic categories

Governance of VET and lifelong learning

Establishing and developing skills intelligence systems

Subsystem

CVET

Further reading

[Cedefop publication - ReferNet news - Spain: new techniques for skills anticipation: big data](#)

[Tender published for the automatic classification of the training actions of the different initiatives of the Vocational Training System for Employment](#)

[Sancha Gonzalo, I. \(2020\). Vocational education and training for the future of work: Spain. Cedefop ReferNet thematic perspectives series.](#)

Related policy developments

2023 Completed

Monitoring and evaluation of vocational training in the labour scope

Vocational training for employment in the labour scope was last reformed in 2015. The reform aimed at an efficient system for monitoring and prospecting the labour market, based on coordination of all actors (administrations, social agents, experts). It also aimed at:

 SPAIN

Type of development

Regulation/Legislation

Subsystem

CVET

“ ... ” Cite as

Cedefop, & ReferNet. (2026). Big data techniques for skills anticipation: 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/28691>