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ESTUDIOS

Challenges and action strategies in research on Vocational Education and Training in Spain

**Executive summary** 

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## Challenges and action strategies in research on Vocational Education and Training in Spain

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### **Executive summary**

This document presents the challenges and action strategies relating to the promotion of research into vocational education and training (VET) in Spain. It is the result of a participatory process of reflection that has included stakeholders involved directly and indirectly in research in Spain and who, representing both the research community and key members of the VET ecosystem, demand new knowledge and evidence with which to improve their work in the educational/ training, institutional, business, trade union and social realms.

This collective initiative aims to uncover the most appropriate way to conduct research into VET in Spain (RVETS), acknowledging that 'there is no teaching without research or research without teaching' (Paulo Freire). It intends to achieve this by 'increasing synergies between education, research and innovation activities, with a sustainable growth perspective', as recommended in the *Joint Report of the Council and the Commission on the implementation of the strategic framework for European cooperation in education and training (ET 2020)*.

Conscious of the fact that what is not known does not exist, this initiative takes as its starting point the report titled Diagnóstico de la investigación sobre la Formación Profesional Inicial en España (2005-2017) [Diagnostic analysis of research into initial vocational education and training in Spain (2005–2017)] by Benito Echeverría and Pilar Martínez-Clares in 2019. This report highlights notable structural, content-related and methodological weaknesses in research in this initial vocational education and training (IVET) subsystem. Research into VET in the educational field is scarce and sporadic and lacks consistency both geographically and temporally. The sources of funding are negligible and universities and similar entities exhibit little commitment to its development. There are very few well-established research groups working on long-standing lines of research in this field, and communication channels between VET researchers are practically non-existent. Most researchers work within the field of Education Sciences, and there is a total lack of research into training enterprises. Almost all the research is descriptive, with small and generally non-random samples. Interviews and guestionnaires are the predominant measurement tools, and they are not always properly validated and tested for reliability.

These weaknesses share many points in common with those observed in VET for employment. This shapes the VET system and gives rise to a wide-ranging debate on how best to *identify the main challenges facing RVETS and the most appropriate strategies and actions with which to address them, as analysed and agreed upon by expert groups committed to the development of VET.* 

The aim is to answer these questions through an eminently participative and cumulative process of individual and collective reflection, analysis and comparison across working groups and in conjunction with consideration of proposals submitted by the main stakeholders active in VET in Spain. In total, three working groups were formed: the first two operate at Spanish level, while the third provides an international perspective. The first group is made up of researchers drawn from the Spanish context and comprises 10 VET researchers from various universities and research centres. The second group consists of key stakeholders in Spain's VET system and spans 23 representatives from a variety of contexts: institutional (at state and regional level), educational/training (VET centres), business and employment (chambers of commerce, employers' associations and unions) and associational (associations and foundations). The third group provides an international perspective and comprises 3 international researchers with a long history of research in the VET field.

To conduct their internal and external analysis of RVETS, the Spanish researchers essentially used the SWOT and, as a complement, CAME techniques. The first, used to ascertain RVETS' Strengths, Weaknesses, Opportunities and Threats, made it possible to define, agree on and prioritise the main challenges to be tackled. The action strategies to address the challenges are drawn from the CAME analysis and are designed to Correct the existing weaknesses, Adapt to the threats faced, Maintain the strengths identified and Explore the opportunities detected.

Based on this diagnosis, these researchers agree that successful implementation depends on addressing the following challenges:

I. Reference framework					
1. Common reference framework for high-quality research					
II. Strategies					
2. VET research agenda		3. Strategic research and innovation plan 4. Them		hematic lines of VET research	
III. Means and instruments					
5. VET research centre	6. National network of researchers	7. Stable resources and funding	8. Stakeholders integra into research	ated 9. Access to micro-data and databases	
IV. Information, communication and transfer					
10. Raise awareness of and insist on the need for and importance of research		11. Dissemination of knowledge transfer of the findings		12. Communication channels with government	

#### The twelve main challenges facing Spanish research on VET

Having delineated the challenges and their respective action strategies, the Spanish researchers conveyed them to the key stakeholders and international researchers along with a series of thematic lines of research they considered to be of priority importance to the development of RVETS. Each of these 12 challenges is accompanied by an average of five strategies and the same number of actions. Overall, there are 57 strategies and 58 actions, all submitted by the researchers and key stakeholders in their respective group sessions and based on the group members' individual reflections. Both the challenges and the strategies have been addressed from the perspective of basic questions of *what, who, how, where, when and with what means.* 

The assessments made by the key stakeholders regarding the challenges faced are that it is 'fairly' (> 3) or 'very' (4) necessary to address most of these challenges and to implement the corresponding actions to ensure proper development of RVETS. Among the 12 challenges posed, two (numbers 3 and 9) were widely agreed upon by Spanish researchers and key stakeholders:

- 'Develop a **strategic VET research and innovation plan** at state and regional level with a plural, interdisciplinary approach.'
- 'Agree on simple and secure mechanisms for **accessing micro-data** from different institutions and administrations, as well as encouraging **creation of data-bases** to facilitate high-quality research.'

As regards canvassing international researchers for their opinion on these challenges, we observed that, for them, neither a common reference framework (Challenge 1) nor a VET research agenda (Challenge 2) are a priority, although they do believe that if they were to exist they should be positioned prominently on the national agenda. This is probably because research into VET is already sufficiently well established in the international researchers' countries and so does not require such measures. However, the international researchers did particularly emphasise the need to strengthen research groups and networks (Challenge 6), resources and funding (Challenge 7), university interest in VET (8b) and the promotion of communication channels with government (Challenge 12). This may perhaps be because this group of university researchers has a research background in this field.

When asked which themes should be researched, the Spanish researchers proposed 25 lines. Among those, the following four were selected by the greatest number of key stakeholders:

- New training needs in light of the transformation brought by the fourth industrial revolution
- Definition of professional profiles, based on prospective analyses
- Evaluation of the impact of VET
- Training enterprises (organisation, outcomes, benefits and innovation)

Beyond these 25 thematic lines proposed by the researchers, the key stakeholders consider it essential to have a labour-market forecasting system in place that covers the sectors/territories of strategic importance to economic development so as to identify the training needs in those spheres and contribute to the design of appropriate VET policies. To this end, they recommend identifying promoters of best practice in each line of work, promoting them via a web platform, supporting joint work between researchers and stakeholders, making use of big data and tools such as forecasting, and disseminating the results of the prospective analyses to key stakeholder groups (regional and local government, businesses, training centres, apprentices, occupational groups, etc.). They propose creating lines of research into the scientific, technical, economic and social features of the future context so as to anticipate its requirements, supported by an observatory to monitor developing trends.

Linked to this prospective research, the stakeholders will develop other programmes to monitor and evaluate labour market integration among current and future apprentices. They consider it particularly necessary to have access to verified data on employability (sectors, contracts, entry times, etc.); to analyse the imbalances between supply and demand for VET graduates; to examine in depth the pathways leading to the workplace and those increasingly emerging between VET and university education; to improve guidance programmes, techniques and tools; and to examine the features of an efficient and effective Vocational Guidance Information System.

In addition, some of the key stakeholders particularly emphasise the importance of innovation-oriented research in the institutional, business and, above all, educational fields. From their perspective, innovation needs to be integrated into VET centre organisation and management, supporting management and coordination teams. They also believe it is necessary to create collaborative centres or spaces for VET technology research and innovation where the above-mentioned teams and instructors can participate actively in research rather than merely being subjects or consumers of it. They also recommend training at least some of the instructors on how to comprehend and develop innovation processes appropriate to their centre or group of centres, doing so through training programmes addressing project management and research and action methodologies and techniques, etc. At the same time, they recommend providing the necessary infrastructure, resources and tools so that instructors can devote part of their working hours to these activities, supported by public and private funding programmes for innovation projects.

The 25 themes proposed by the research group operating in the Spanish context are combined with a further 32 that the key stakeholders also consider to be priorities and relay to the international researchers for consideration. The latter group reiterates the particular need for many of the thematic lines related to the fourth industrial revolution mentioned above. Above all, they emphasise those relating to

the new vocational skills and qualifications demanded by the productive sectors, along with a broad series of issues referring to training in the workplace, instructor training in these settings, research into good practice, territorial distribution of the training offering based on demand from the productive sectors, and issues relating to spaces in which to contribute to and determine VET policy. In contrast, the international researchers did not see the same need for research into issues relating more to Spain's National System of Vocational Qualifications (NSVQ), the National Qualifications Framework (NQF), recognition and accreditation of vocational skills acquired through formal and informal lifelong learning, or certificates of professional competency.

The main conclusion of this initiative is that it is necessary to make a commitment to research into VET in Spain and, to do so, it is important to work together with all the stakeholders. It is therefore desirable to proceed with progressive and inclusive formation of an RVETS ecosystem, supported by the active participation of government, academic, economic and social stakeholders committed to its creation and development and open to the incorporation of other stakeholders interested in strengthening VET through research and innovation. By doing so, public administrations, universities, companies, training centres and other entities will be able to share human resources, make better use of the ones available and reduce costs. It is to be hoped that successive governments gain the greatest possible political, economic and social support for RVETS and generate synergies and spaces in which to share ideas, achievements and concerns; promote dialogue with public authorities; encourage public–private alliances with other interested stakeholders; raise the profile of scientific output on VET; and promote initiatives to evaluate and enhance Spain's training system.

Finally, it is important to note that this process of participatory reflection, collective analysis and joint production of proposals is necessary but, in itself, insufficient. We need to continue working in this direction, and to do so in an open and participative ecosystem in which the strategies and actions proposed in this study contribute to addressing the challenges facing research into VET.



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