



# Distance Vocational Training for employability in Spain, Portugal and Dominican Republic

## *Formación Profesional a distancia para la empleabilidad en España, Portugal y República Dominicana*

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### Abstract

Vocational Education and Training aims at developing students' knowledge and skills for insertion in the labour market. Portugal is currently redesigning its model to meet the new demands of the economy, society and business. In Spain, a major transformation has taken place with a focus on initial and continuous teacher training, as well as the design and implementation of a new legal structure for the organisation and integration of Vocational Education and Training, while the Dominican Republic is working on the adoption of a more practical and experiential training model. This study determines the key aspects to ensure the development of a new, more personalised instructional model based on the development of individual competencies, potential and talent. A qualitative methodology has been used through an integrative and interdisciplinary literature and document review. The results show that there is a great diversity of models and specializations worldwide, which makes the internationalization of Vocational Education and Training relevant to broaden discussions on the subject within the current context. As a conclusion, the pillars for a comprehensive training strategy have been identified.

**Keywords:** Vocational Training, distance training, employability, Dominican Republic, Spain, Portugal.

### Resumen

La Formación Profesional tiene como objetivo el desarrollo conocimientos y habilidades de los y las estudiantes para la inserción en el mercado laboral. En la actualidad, Portugal está rediseñando su modelo para responder a las nuevas demandas de la economía, sociedad y empresa. En España se ha realizado una gran transformación poniendo el foco en la formación inicial y continua del profesorado, así como en el diseño y la implementación de una nueva estructura legal para la ordenación e integración de la Formación Profesional, mientras que República Dominicana está trabajando en la adopción de un modelo formativo más práctico y experiencial. Este estudio determina los aspectos clave para garantizar el desarrollo de un nuevo modelo instruccional más personalizado basado en el desarrollo de las competencias, potencial y talento individual. Se ha utilizado una metodología cualitativa mediante la revisión bibliográfica y documental integrativa e interdisciplinar. Los resultados muestran que existe una gran diversidad de modelos y especialidades de Formación Profesional a nivel mundial, lo que hace pertinente la internacionalización de la Formación Profesional con la finalidad de ampliar las discusiones sobre el tema en el contexto actual. Como conclusión final se han determinado los pilares para una estrategia formativa integral.

**Palabras clave:** Formación Profesional, educación a distancia, empleabilidad, República Dominicana, España, Portugal.

## 1. Introduction

The twenty-first century has brought profound transformations in an increasingly digital and global world that constitutes the basis of society, the economy, culture, and business. In this context, Vocational Training (hereinafter VT) has consolidated as one of the pillars of experiential training that students need today for developing competencies and skills to be actively involved in the labor market (Comissão Europeia, 2018).

Young people and adults have great digital skills, although they are mainly oriented towards consumption, excluding higher conceptual and cultural competencies that allow them, for example, to reject false information transmitted online. The great challenge is therefore to train young people and adults with multidimensional and transversal competencies, which not only bring them closer to knowledge, but promote the development of their creativity and critical thinking so that they can be active participants in society and in the use of technologies as a cultural and autonomous belonging (European Commission, 2019).

The main starting points of the new generation of competencies-Partnership for Learning of the 21st Century (2006) such as the reference of the World Economic Forum (WEF) of 2021 and the precedents since 2015, where the categories of knowledge, skills, attitudes, and values that lead young people and adults to action are presented. These competencies include global citizenship competence, multicultural competence, learning and innovation competencies, as well as digital competencies (Figueiredo, 2019) (Comisión Europea, 2018). In this way, Vocational Training is seen as a facilitator of communication while helping and enabling students to acquire numerous competencies to act in the global world—the *savoir être*, the *savoir comprendre*, the *savoir apprendre/faire* and the *savoir s’engager* (WEF, 2015; WEF, 2016; WEF, 2017; WEF, 2018 and WEF, 2021).

The labor market is undergoing a profound restructuring, and many of the professions that existed have disappeared. In addition, the technological revolution will create new professional sectors that in most cases are linked to technology and digital transformation. The World Economic Forum concluded in 2018 that technology could create 133 million new jobs by 2022. Once the pandemic started in 2019, not

only professions have changed, but the very nature of work. This paradigm shift is the result of the Fourth Industrial Revolution, driven by disruptive technologies such as automation, artificial intelligence, robotics, virtual reality, or machine learning. For this reason, mastering these skills will become a widely differentiating factor and will make a difference in the professional success of those who now learn them (Delgado-Rodríguez *et al.*, 2023).

Although technological and digital competencies are the greatest differential value, there are other aspects that cannot be neglected by vocational and practical training institutions: communication, interpretation, critical thinking, and the ability to create and innovate, among others. In this sense, it can be said that the new jobs that will emerge, driven by the increasing use of technology in routine tasks, will also require social, logical and behavioral skills that complement the more technical skills (National Research Council, 2012).

During the last decades, there has been an increase in training activities related to Vocational Training. According to data collected by the International Labor Organization (ILO) through its Inter-American Center for the Development of Knowledge in Vocational Training (Cinterfor) in 2017, a total of 23 million students in Vocational Training were reported in Latin America, the Caribbean and Spain, representing 22 % growth compared to 2016 data.

In 2021, 6.1% of students in the Dominican Republic (a total of 670,728 participants) were pursuing studies in Vocational Training, 11.3% (5,317,992 students in total) in Spain and Portugal. It is worth highlighting the employment and digital training measures carried out by the Instituto de Emprego e Formação Profissional (IEFP) under the Employment +Digital 2025 Program, which aims to promote the digital transformation of companies and improve the individual competencies and qualifications of each student in Vocational Training projects. According to IEFP, at the end of 2021 the number of students in Portugal is 1 016 821 of which 87 854 were inserted into the local labor market as a result of public policies around this vocational training.

Vocational training constantly seeks to respond to the needs of the labor market, thus ensuring employability in various areas of training. In addition, it focuses on updating to cope with current

changes in the various current technological approaches (Area-Moreira *et al.*, 2020). In Vocational Distance Learning, both in Spain and in Portugal and the Dominican Republic, it is believed that successful professionals of the future are not only those who master technology, but also those who connect, relate, communicate, include, and think.

For all these reasons, when assuming the mission of training people who can solve the problems of the future, technology must also be adopted to the learning process, beyond a mere tool. It must be the engine that stimulates logical reasoning, enhances autonomy, and offers new ways of thinking and doing, essential to the future that is happening today, in the present. Only the combination of these two universes - on the one hand, technology and, on the other, transversal competencies - can mean a smiling future to all those who are taking or will soon take their first steps in the labor market (García *et al.*, 2011).

This academic article presents the results of a research on the impact of remote application and vocational training in Spain, Portugal and the Dominican Republic, as key aspects to access the labor market. A methodology of literature analysis, language and structure has been approached, which can be differential factors since research has been conducted in Spanish and Portuguese, contributing to the adaptation of these languages, and contributing to society in general, and providing a comparison of the reality of the current topic, thus contributing to the knowledge of the area of study and originality in topics of Vocational Training.

## 2. Methodology

This study addresses the different perspectives and trends of Distance Vocational Training with a focus on employability and from a comparative analysis between Spain, Portugal and the Dominican Republic. The objective is to determine how this educational model is applied in a representation of Europe and Latin America to obtain an overview of the impact on the acquisition of competencies and skills to improve employability.

The methodology used for the study is documentary analysis focused on data collection, depth of information techniques and analysis of documents and reports to select, compile, organize and interpret information from this training (Mira *et al.*, 2004).

It should be noted that it will be the basis of a new phase of qualitative analysis research based on the theoretical foundation to know and deepen the key aspects in each country for the development of vocational training (Castro and Castro, 2002).

Documentary research was conducted based on Bisquerra (2012), using systematic procedures and objective description of the content. From this procedure, some words related to Vocational Training, inclusion and employment that are frequently used in the literature were identified, and a study was conducted based on the frequency of these words. Then, after recognizing the words, the frequency of words corresponding to the investigated terms was counted. These terms were categorized in tables according to their location in the document, once the analysis and tabulation of the data was completed, the material was explored from the frequency of appearance of the terms, the distribution and the arguments described in the course and the analyzed documents. Subsequently, the text went on to a second stage of analysis.

The main bibliographic sources that support this research allow analyzing and reflecting on the importance of distance vocational training and the impact it has on the development of skills for the global labor market. It is therefore intended to identify good teaching practices and didactic strategies in distance learning that allow acquiring skills and promote employability from an international perspective (Loayza, 2020; Aguelo *et al.*, 2022).

The main literature consulted and the backbone of the research was based on Negri Cortés and Leiva Olivency (2016) on Vocational Training, Inclusion and Employability; Nieto *et al.* (2022) have provided an approach to skills as key to success; and Moreno Marquez (2021) has based on the proportional relationship of excellence and quality of Vocational Training with the improvement of employability in Spain, and the Dominican Republic and its current trends and perspectives.

## 3. Vocational Training

Vocational training seeks to enhance the appropriate skills so that students can respond to the demand of the labor market. Such training is geared towards the performance of specific work activities. It can be acquired through formal education, techni-

cal or various training, being an alternative for people who have been able to access a university education and want to develop their skills in the labor market or upgrade to improve their current jobs or improve their employment opportunities.

Some of the most common areas include information technology, business management, health, manufacturing, hospitality, and others.

Today, Vocational Training is not seen by the art of knowledge, but reflects its practice in acting, intervening and facing the various situations that may locate us in the different spaces where the professional has to develop his/her career and solve everyday situations. Therefore, today we are looking for a professional who is willing to adapt to the different situations, today we need a person who when training has an attitude to face the challenges that arise in the future; for this reason, the training should help him/her to learn and apply the knowledge acquired in the world of work (Alonso Betancourt *et al.*, 2020)

Vocational training has a practical and theoretical reality, where people are trained with the purpose of introducing knowledge to the professional field. New times require more demand in Vocational Training, since when students graduate from High School, it is Education or Vocational Training the one that would give answers to the productive needs and services based on the needs of society (Oliva Feria *et al.*, 2019; Cabanillas García *et al.*, 2019).

### 3.1 Remote Vocational Training

Technological advances have brought about changes in working methods and the emergence of new professions. It is increasingly important to keep up to date to improve our technical, digital and technological competences. In this sense, training and specialization courses are an excellent option to stay competitive in the labor market, increase our chances of being hired and improve the development of our career (Area-Moreira *et al.*, 2020).

Today, training centers are increasingly introducing certified online training solutions that are tailored to the needs of their participants and enable in some cases more personalized education.

Due to the Covid-19 pandemic, E-Learning and B-Learning have gained popularity in teaching, learning and professionalization modalities.

E-Learning continues to use, in some cases, tools and applications from the world of E-Learning 1.0 (unidirectional), which may limit access to information. However, in the case of E-Learning 2.0 (bidirectional), a greater connection is established between the participants in the learning process.

In this context, some efforts towards the use of E-Learning 3.0 (collaborative and cooperative) are already visible, linking more easily knowledge and 4.0 (bidirectional), which links people, connects shared knowledge between data elements and establishes a context for elementary reasoning. In other words, intelligent environments with certain semantic skills and guided by distributed information and knowledge systems, which use totally innovative scenarios, contexts and environments and promote communication and interaction in a virtual classroom situation, by connecting real-world and virtual devices in real time with people (Gutiérrez-Martín *et al.*, 2022).

Both E-Learning 3.0 and E-Learning 4.0 are learning methodologies that are conducive in the context of distance learning, because they allow the creation of scenarios and didactic strategies that contribute to lifelong learning and the creation of learning communities by allowing different people to communicate and interact in real time and space, as well as the exchange of knowledge in a collaborative and cooperative way that, consequently, help the employability of the students coursing the distance modality.

On the other hand, B-Learning in distance vocational training for employability is a concept that plays an important role in higher education because of its flexibility and has gained, in recent years, a greater role in during Covid-19 pandemic (Carrascal *et al.*, 2020).

The agents involved in the training processes soon realized that it made perfect sense to use B-Learning as a way to stimulate student interest. The emergence of other didactic and pedagogical forms, not only the lecture, took place in the classrooms and educational centers as a common thing and a necessary resource in the planning of the trainers.

Vocational training is increasingly focused on the student and his/her learning experience; for this reason, training must be oriented and personalized. The student must be an active part of the teaching and learning process and it is for this purpose that B-Learning integrates didactics. Thus, this formative

modality arises from learning that results from different methods, techniques and instruments in a way that consolidates collaborative and inclusive learning (Feliz Rosario *et al.*, 2022).

For technology to have a significant impact, it is necessary to understand the didactic and pedagogical implications to ensure that both the training provider and the trainers are prepared to face this reality. In the case of B-Learning, it is necessary that the trainer has certain skills to be a good coordinator and teacher moderator in the physical room, but also in the virtual room, being fully aware that the student is an increasingly autonomous individual, independent and responsible for his/her learning, able to create his/her own meaning and valuing his/her opinion and choice. These aspects are essential for creating a culture in distance learning, valuing B-Learning as a didactic strategy that promotes critical thinking and the practical application of knowledge, essential for professional performance today.

Therefore, the extension of the training classroom to the virtual or online space has become a reality increasingly used in Vocational Training, where students and trainers must necessarily take a more active role in the development and dissemination of didactic content, enhancing their pedagogical action and contributing, at the same time, to the acquisition of essential competences at a personal and professional level (Aguirre Aguilar, 2020).

According to Santos *et al.* (2014), there are some advantages, both for e-Learning and B-Learning, of using an LMS platform, and take them to Distance Vocational Training, which is increasingly closer to the designs of the labor market:

- It innovates in the processes of training and education, allowing the continuous acquisition of new knowledge (Lifelong Learning).
- It eliminates the problem of geographical dispersion of young people and adults.
- It allows greater flexibility, differentiated study rhythms and personalization of learning.
- It removes spatial and temporal barriers, opening up training pathways for people who have difficulty moving or studying.
- It stimulates self-learning, allowing a continuous personal development of individuals, giving them more autonomy.

- It encourages the continuous acquisition of new knowledge.
- It optimizes resources with significantly reduced training costs, especially in time, travel and on-site.
- It guarantees and encourages experimentation and familiarization with technology and new telematic services.
- It enables a large number of people to be trained in a short space of time.
- It allows the successive repetitions necessary for studying the subjects.
- It enables a rapid return on investment (ROI), especially for a large number of students.
- It makes content more appropriate and attractive, especially those presented in multimedia format, allowing the development of new skills very important for the labor market.
- It allows for the reconciliation of learning, professional activity and family life.
- It equals training opportunities appropriate to the needs of a given population from an inclusive perspective (excerpted from Santos *et al.*, 2014, pp. 22-23).

The advantages mentioned are the basis of the paradigm shift in distance vocational training for employability, able to stimulate young people and adults for inclusive and continuous teaching and learning. Breaking paradigms in the use of both E-Learning and B-Learning in VT and implementing new paths to a new reality, collaborative, cooperative, inclusive has opened opportunities after the Covid-19 pandemic.

The distance learning modality is a type of teaching that gives students access to obtain a learning without having to physically go to a classroom, therefore, they can access online content through a virtual teaching and learning platform (Rodríguez *et al.*, 2021).

The student must have some motivation and discipline when putting it into practice to do the assigned tasks in a correct way. Because through online platforms new activities and resources are allocated so that the student can improve his/her knowledge and deliver online assignments in coordination with the tutor (Rodríguez *et al.*, 2021).

The distance vocational training modality is an increasingly popular option, as it improves and pro-

motes employability. This offers flexible and accessible alternatives for those who seek to improve their skills and knowledge, being able to balance their jobs and family commitments (Oliva Feria *et al.*, 2020).

This training model allows students to acquire specific knowledge, in a specific development area with a wide variety of branches. Today such distance learning includes nationally and internationally recognized certifications, which can significantly improve the employability of students. Also, for those looking to advance their studies, changing careers or upgrading in a specific area is often beneficial.

It can be affirmed that the technological resources used in distance learning, as well as content planning, must be adapted to this new teaching modality through interactive digital tools. Hence, it will be necessary to deepen the functioning of virtual teaching platforms in addition to knowing their structure, with the aim of designing more practical contents and activities that promote a participation of students being protagonists of their own learning (Manrique-Losada *et al.*, 2020).

#### **4. Employability and Vocational Training in Spain, Portugal and Dominican Republic**

The management of employability in various countries is a very important issue, since it depends on the capacity of workers to access the labor market. Some important points of employability in Spain, Portugal and the Dominican Republic determine that issues of employability in Spain according to the National Institute of Statistics (INE), indicates that in 2023 there was an unemployment rate of 13% at the beginning of January. Faced with this, employability varies according to the area and the different sectors, depending on the region in which it is developed. In terms of Vocational Training and employability, the technology and health sectors are constantly increasing.

Continuous education and training is increasingly needed, Vocational Training in different specialized areas has had a positive impact on the labor market, especially in some sectors as well as tourism and hospitality. Faced with this, the number of young people choosing to acquire a degree of Vocational Training is increasing in Spain, since it facilitates access to the labor market and in this way, they can

generate income continuously and continue preparing in their area of development (Feminía, 2019).

According to the National Institute of Statistics (INE) Portugal obtained an unemployment rate of 6.7% in December 2022, considering that employability varies, depending on the sector in which it is developing, in this case it is higher in some regions such as, Lisbon, the capital, in technology and service sectors.

Portugal has experienced an increase in foreign investment in tourism in recent years, for this reason it has created opportunities to generate jobs in this sector, together with other sectors such as technology; for this reason, the constant training for employability grows continuously.

In the Dominican Republic, according to data from the Central Bank, there was an unemployment rate of 8.7% in the third half of 2022. Currently there is an increasing rate in the tourism, manufacturing and construction sectors, mainly focused on the area of the capital, Santo Domingo. Technical and specialized training for the Dominican economy has experienced a steady growth in the last years and just as Portugal, it has had a significant increase in the tourism sectors (Ministerio de Industria, Comercio y PYMES, 2023).

For this reason, people use technical vocational training to be continuously trained and thus be able to update their curricula on topics in the specific area in which they develop. For this reason, Dominican Republic has made many agreements with companies to promote the employability of students who develop technical vocational training.

It is said that Spain was one of the most affected countries by the economic and financial crisis of recent years, also considering the current war between Russia and Ukraine, so that in recent years it has experienced a high unemployment rate. Although the unemployment rate is constantly recovering, it is high unlike some countries in Europe.

In another sense, in terms of employability Portugal has experienced a steady economic recovery in recent years. The unemployment rate has decreased significantly, and the economy is more competitive, although still in terms of employability it remains being a challenge in some areas, specifically in the different regions of the interior of the country.

As for the Dominican Republic, the unemployment rate remains very high. Although there has

been a decrease in recent years, the lack of employability has affected some jobs by the low salary in some sectors, although Tourism in the country is constantly increasing and there are employment opportunities in this sector, which is one of the main sources of income in the country.

We can indicate that employability in Spain, Portugal and the Dominican Republic is constantly affected by the different economic and financial situations that may arise, in addition to the various offers and demands in jobs on the part of the lack of skills of workers and the generation of public policies to promote job creation, both at the private and public levels to improve the management of employability in people (Hernández Carrera *et al.*, 2020).

In terms of employability after the Covid-19 pandemic, there has been a significant increase in technical vocational training in Spain, Portugal and the Dominican Republic, since various programs in different areas of specializations have had to be updated and digital skills have had to be promoted for changing various programs that are carried out. For this reason, the Vocational Training in these countries is constantly increasing and the students are more capable of being able to cope with the various jobs and with the diverse needs that arise in the labor market, especially in the area of skills and technological competencies.

#### 4.1 Spain

The Spanish education system is ruled by the Ministry of Education and Vocational Training, taking into account the development of some laws, including the Organic Law of Education LOE approved in 2016 in which the structure and organization of educational levels was defined by which it has been modified through the Law of Improving Educational Quality LOMCE approved in 2013, with the aim of guaranteeing equal access to education for all (Brunet and Böcker, 2017).

Like other countries, Spain has experienced a significant increase in enrollment towards Vocational Training as it is an option increasingly valued by students to promote knowledge skills and be applied in the world of work, since many can access more quickly with specific knowledge to the labor market, increasing access to various jobs. In recent years, there has been many jobs in the areas of

hospitality, business management, consultancy and education. Spain currently has a wide range of vocational training courses, with a total of 585 professional qualifications, 174 training courses (28 basic, 59 middle and 89 higher) and 21 specialization courses. In this context and as a basis and reference for this training offer, the National Catalog of Professional Qualifications has 756 qualifications from 26 different professional families (Ministerio de Educación y Formación Profesional, 2022).

#### 4.2 Portugal

The education system in Portugal provides the development of technical and professional competencies in the field of education and is divided into the basic and secondary levels, complementing the secondary level in the technical and professional part. There is a public institute in Portugal called the Employment and Vocational Training Institute (IEFP), whose 'mission is to promote job creation and quality and to fight unemployment through the implementation of active employment policies, including Vocational Training' (IEFP, 2023).

In addition, there are other agencies, such as the Ministry of Education and Science, the Ministry of Economy and the Ministry of Labor, Solidarity and Social Security, and such training is promoted in a collaborative way to cover all people.

Currently, the management of Vocational Training in Portugal is being promoted and constantly renewed to improve the employability and competitiveness of the economy. Therefore, they have made the training offer more flexible, strengthened and expanded to be able to internationalize the management of training and strengthen digital competences towards a stage of renewal and expansion, betting on improving the employability of the country. In recent years, the demand for jobs in construction, hospitality and commercial management has been steadily increasing. Portugal currently has a wide range of vocational training courses, with a total of 392 professional qualifications, 3955 competency units and 8662 short-term units according to the National Catalog of Professional Qualifications (ANQEP, 2023).

### 4.3 Dominican Republic

The education system of the Dominican Republic is ruled by the Education Act 66-97, which carries out the education of the country, while technical vocational education is provided through the Institute of Technical Vocational Training (INFOTEP), which works hand in hand with the Ministry of Labor to promote the employability of Dominicans. This program aims to develop the skills and techniques to generate employability of Dominicans by developing their training level to respond to the various socio-economic needs in the field of employability and training of the country (Arbizu Echávarri, 2019).

In addition, technical and vocational training is also carried out in secondary education between the last two courses and in several specific technical areas, where students complete their technical careers.

The INFOTEP currently includes various training programs, among which are computer science, hospitality, design, administration, construction, tourism, health, electronics, electricity, industrial clothing manufacture, bar and restaurant, beauty, among others. These programs are taught through technical training in training centers and also remotely through its virtual platform.

At present, young people are becoming very interested in technical vocational training, as several programs have been launched to promote their digital skills. Although there are still challenges to overcome and transform Vocational Training in the Dominican Republic, work is constantly being done to improve Vocational Training and to cover the current needs of the labor market.

The Dominican Government, along with INFOTEP, seeks to promote technical vocational training through constant training towards education and employability, and has therefore created new training centers, modernized their learning spaces and established new partnerships with companies to encourage the participation of technical vocational training, in addition to carrying out innovation and entrepreneurship programs.

In the last year, the market demands for the Dominican population in trade, services, free zones and construction have increased significantly.

In terms of employability in the professional area, both Spain and Portugal and the Dominican Republic have a constant concern for promoting quality vocational training to meet the demands of the labor market and facilitate the integration of students. Therefore, these countries are constantly working to implement correct management in the area of VT, developing digital competencies and skills to adapt their training system to the labor market, guaranteeing experiential and practical training. In these countries, the labor market is growing in the areas of hotels, business management, consultancies, education, construction, business management, services and free zones.

INFOTEP's training activities in 2021 were grouped into 69 professional families, ranging from physical training to strengthening and developing the productive, industrial, tourist, hotel, health, agricultural market and teacher training and training, including those related to services. The INFOTEP, with an expanded infrastructure, has five technological centers, the School of Hotels, Gastronomy and Pastry, in Higüey, 56 mobile workshops; 277 System Operating Centers (COS); the centers of Teaching Development and Innovation and of Assistance, Training and Business Competitiveness and the Virtual Training Center (Instituto Nacional de Formación Técnico Profesional, 2021). In addition to Infotep, the Directorate of Technical and Vocational Education, which is part of the General Directorate of Education, currently carries out technical and vocational training in secondary education in academic and arts, according to the formal education structure of the Dominican Educational System (Ministerio de Educación, 2022).

The DGETP (Directorate of Technical Vocational Education) is a unit of the Ministry of Education that is responsible for technical vocational education in the second cycle of the technical modality in the educational centers of the country, in charge of developing policies and designing curricula for this education level, which is related to the sectoral scope, internships and education program "emprenderá" (DGETP, 2020).

## 5. Skills for employability in the 21st Century

Considering that the great challenge is to increase the competencies of the VT, it is believed that digital inclusion, the exchange of ideas, learning resources, the democratization of training, social inclusion and intercultural communication are at the basis of a paradigm shift in relation to the use of digital technologies, namely the use of E-Learning and B-Learning as a way to promote competencies, especially multicultural competence and intercultural communication, helping and promoting employability.

Therefore, it is essential to identify scenarios and strategies for a didactic model in Distance Vocational Training that contributes to a new culture, a consolidated trend and an irreversible process. Digital technologies and communities of practice (wiki, blogs, videos, forums, chats, open resources, simulations, gamification, multimedia animations, image, video, audio, among others) should therefore be at the service of the teaching-learning process, in which learners are the center and professors become knowledge facilitators, interacting towards collaborative and cooperative knowledge, enabling the development of competencies and facilitating employability.

Adapting the words of Pereira *et al.* (2006) to this specific context, it is necessary to build a pedagogical model based on premises such as inclusion, flexibility, integration and respect for the individuality of learners, since, as Moraes (2001) states, “there are instruments of collective intelligence in the network, capable of gradually and procedurally promoting an ethics through interactions, based on principles of dialogue, cooperation, negotiation and participation” (Moraes, 2001, p. 6). In addition, we have as a basis the competencies defended and presented by the Consejo Nacional de Investigación (2012), Foro Económico Mundial (2015, 2016, 2017, 2018, 2021), and the Companion Volume (Consejo de Europa, 2017; Figueiredo, 2019). As a transversal axis of the studies mentioned above, digital competence appears, which, for example, in the context of Vocational Training, is fundamental in relation to the mastery of other key competencies, such as the safe and critical use of digital information and communication technologies and problem solving.

In this context, and in view of the need to train professors to be prepared for acquiring and applying of these essential competences, it is observed that in the Dominican Republic and, above all, in Spain and Portugal, an expansion of the degree is taking place linked to the strategic objectives of the country and the European Community, through the strengthening and expansion of distance education, with the aim of developing competencies, creating itineraries for young and innovative adults, creating conditions for the improvement of distance education, supporting a massive distance education system (access and quality), responding to the challenge of training young and adults as local citizens and professionals (exchange, communication) and investing in intercultural education within Vocational Training (Martín-Párraga *et al.*, 2022).

Thus, individual work and collaborative work, or in pairs or small groups must be considered, which obviously involves social learning respecting the individuality of each student. Because not everyone learns in the same way, each individual adopts a learning perspective they feel more comfortable with, and exclude others they are less comfortable with (Pritchard, 2009; Valente, 2022).

Therefore, according to Valente (2022) the teaching aspects to consider in distance learning for the acquisition of skills and to help young people and adults in the insertion of the labor market are pointed out:

- Provide an immersive virtual environment of frequent dialogue through mediation.
- Create collaborative activities between peers and collective productions.
- Use teaching strategies that allow respecting the various learning styles.
- Enable proposed activities to be based on customized curriculum strategies and scenarios.
- Enhance activities based on virtual space usage styles.
- Design the contents based on heutagogy, so that they are learned in a collaborative way, and allow the students to be author, producer and creator of their spaces.
- Use teaching strategies that allow reflection, criticism and analysis and not mere reproduction or repetition (audio, video, image, narra-

tion, multimedia animations, forums, simulations).

- Use diversified learning resources (texts, videos, interviews, simulators, scientific articles) with the convergence of numerous technologies.
- Track student performance, providing feedback that enables self-regulation of learning over time.
- Encourage gamification in distance modality.
- Allow portfolios to be created in distance learning.
- Invite international speakers on topics related to the goals and objectives and contents taught in Vocational Training.
- Use Metaverses to Teach English in Distance Vocational Training.
- Organize virtual communities of practice.
- Evaluate in a structured and periodic way to monitor the mastery level towards learning objectives and their respective contents.
- Evaluate using Learning Analytics.

This study states that this learning should conceive a supervised interaction, through which it is intended to stimulate reciprocity among learners, enhancing the exchange of information and experiences, as well as cooperation, collaboration and interaction in the construction of knowledge, which are also added values in the teaching and learning process. It is also important to highlight the intention of creating a virtual space for guided training under the careful look of the trainer and the pedagogical supervisor, in which there is interaction, distribution of information and doubts, in which the student can develop follow-up activities, ask questions, exchange information and experiences resulting from networked knowledge (Valente, 2022).

## 6. Current outlook trends

The current global situation, as a result of the Covid-19 pandemic and the war in Ukraine, has forced companies to adjust their internal operating dynamics to maximize their returns effectively, taking into account the relationship with competition. In the current scenario, companies increasingly feel the need to invest in and implement management models focused on developing their human capital, as they have realized that success and

competitiveness depend, above all, on how quickly they can adapt and respond to market challenges. To this end, it is urgent to be more dynamic, so that the use of digital technologies becomes an indispensable requirement to ensure the reorganization of business thinking and, consequently, leads to the recognition of human capital as the main differentiator. It is a question of survival for companies of the 21st century inserted in a knowledge society in which knowledge and learning are the key words in human capital (who wants to be entrepreneurial) and not only in financial capital, in which distance Vocational Training has a great impact.

In addition, the formation contexts of the 21st century, characterized by heterogeneous audiences, involving face-to-face, virtual, and mixed activities, require enormous pedagogical and organizational challenges (Figueiredo, 2019; Moreno Marquez, 2021).

Thus, it can be said that first distance vocational training aims to develop professional competencies in young people and adults, to develop skills, behaviors and attitudes that allow them to be more effective, efficient, and satisfied in the professional field, and to acquire knowledge necessary for their personal and professional development.

In this sense, E-Learning and B-Learning in distance Vocational Training should promote continuous learning in a logic of sharing, transmitting and accumulating knowledge and skills, essential to the performance of the professional activity. It is believed that if there is a scenario in which quality VT and E-Learning or B-Learning can be combined, with programmatic content oriented towards sustained didactic scenarios and strategies, in which the primacy of digital inclusion and flexibility are present, it will be possible, to promote and increase school and professional qualifications, make young people and adults more autonomous in the search for knowledge and promote vocational rehabilitation, promoting (re)insertion and/or (re)integration. Therefore, it is necessary to be aware that the teaching and learning process in distance vocational training for employability should not only be focused on training, but, above all, on the interaction established between members of the learning community (Nieto Ortiz *et al.*, 2022).

## 7. Conclusions

In the current knowledge society in which we operate, we are all (re)learning to teach and learn, including the human and the technological aspects. Assuming that VT is one of the main agents that help individuals adapt to technological, social and cultural changes, it seems fair to admit that its role is extremely relevant for employability.

The main objective of this research is to delve into the characteristics of distance vocational training with a focus on employability in Spain, Portugal, and the Dominican Republic, providing an overview of such training in the different countries. It is found that distance learning in these countries is significantly increasing among the most popular VT options.

The impact of this research has triggered important contributions such as that the objective of distance vocational training in these countries aims to increase employability and improve the various digital skills and competencies of workers and that they can integrate into a more updated labor market, while offering various distance programs that previously did not have a digital path, only face-to-face due to lack of resources, technologies or knowledge by students and training centers.

Vocational training in Spain, Portugal and the Dominican Republic will continue to grow, as the focus of these countries is to offer adaptability in their curricula and manage flexibility for access to them, so students can be continuously trained and access the labor market through up-to-date, solid and digital training.

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