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Between Selection and Inclusion in Vocational Education and Training

Contrasting Switzerland and Spain

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Abstract *This article discusses inclusivness of Vocational Education and Training (VET) at Upper Secondary Education (USE). While inclusion has become a policy aim in compulsory education, it is not so clear that it is the case beyond post-16 education. In the case of VET, the demand of high quality standardized vocational qualifications challenges inclusion. The article addresses three different dimensions of inclusion: access to VET at USE, successfully achieving a qualification, and entering the labor market in a position according to the qualification achieved. We approach inclusion from a policy rather than a pedagogical perspective in section 2, and in section 3 our hypothesis about the inclusiveness of a school-based VET and a dual VET system are presented. In section 4 we choose Spain and Switzerland as examples of these systems, we show indicators, and we describe how both systems deal with the three dimensions of accessing, achieving a qualification and entering the labor market. The analysis concludes by stating that inclusion is particularly difficult because of the first dimension: it is in transition to VET in USE where both countries have more difficulties and could improve their inclusiveness. The problem is the same, but the reasons are different and these are explained in the text, addressing tensions between reputation and inclusiveness and the externalization of measures. Some considerations on comparative education also result from our analysis.*

Title *Between selection and inclusion in Vocational Education and Training: Contrasting Switzerland and Spain*

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1 Introduction

Vocational education and training (VET) has faced a number of challenges worldwide in recent years. In addition to its central task of training qualified workforce for national economies it has to contend with: First, the drift to a knowledge economy, which is leading to a profound change in the nature of professions, with a shift from industrial to service occupations; second, the trend towards digitalization, which is impacting the way work is done, upon labor relations, upon the content of work and occupations, some of which are in danger of disappearing while others are not yet foreseeable; third, the need to improve sustainability, which is recognized not only and not mainly by an aware and resisting citizenship but also by the scientific evidence of climate change and therefore the need to rethink ways of production, consumption and pollution; and fourth, the growing awareness of the importance of inclusive education systems, to which VET is called upon to make a decisive contribution.

Some authors have already pointed to the problems that collective skill formation systems face in the knowledge economy (Bonoli & Emmenegger, 2022), the first challenge we have mentioned. The second and third challenges, digitalization and sustainability, are addressed in recent years in a wide range of publications of policy and academic literature on VET (Anselmann et al. 2022; McGrath et al., 2019).

In this paper, we want to focus on the fourth challenge, inclusion, which is both underdeveloped and underestimated. Inclusion has only recently become a central issue in debates on public education, which has led several countries to adopt measures to extend and increase participation in Upper Secondary Education (USE) to all young people in the reference age group[1].

Inclusion issues have been subject of numerous studies in compulsory education, and its importance is growing in international debates on the reform of education systems especially at the USE level. While in policy studies inclusion in VET has only received little and recent attention (Bonoli & Emmenegger, 2022; Gamboa et al., 2024); research on transition pathways and pedagogical measures have tackled it at various levels (Duc & Kammermann, 2024; Friese, 2017; Kammermann, 2008, 2009; Marhuenda-Fluixá, 2006a, 2006b, 2009; Martínez, 1998; Molpeceres, 2004; Stolz & Gonon, 2012).

The issue of inclusion concerns the entire range of programs offered by an education system. However, VET, more than academic programs, has gradually come to be seen as the appropriate stream to provide qualifications at USE level for a wide range of young people who would normally have difficulty entering a program after compulsory school, and particularly for young people with low academic records or young people with migratory background.

It is therefore at the heart of the debate on the inclusiveness of education systems and in the center of our article. The question is hence: How can VET ensure inclusion of all profiles of young people in its programs at USE level? The challenge is particularly complex today, insofar as VET systems are expected to impart not only skills that can

1 Promoting larger access to USE indicates a trend in Europe towards making USE universal, if not compulsory as it is already the case in some countries: https://fra.europa.eu/en/publication/2017/mapping-minimum-age-requirements-concerning-rights-child-eu/compulsory-schooling

be used directly in a vocational context, but also those skills that are needed to continue training at a later level.

International statistics clearly show that people with a vocational USE qualification are more likely to enter the world of work quickly and to stay there than their peers without such a qualification[2]. Likewise, the economic prospects indicate that more qualified workforce will be needed in the future. At the same time, governments are beginning to consider investing in measures to increase, broaden and facilitate access to VET, especially for young people who are considered "vulnerable", because of "low educational performance, social background, low level of cognitive skills and other challenges" (Bonoli & Wilson, 2019, p. 8).The damage to people's lives and the costs caused by the possible exclusion that threatens people without a USE diploma are much greater, especially in terms of unemployment insurance and social assistance.

Nevertheless, the demand of inclusion challenges the ways that USE functions in every country. The design, structure and frame of USE were established in the 19th century as educational provision with limited access, for an elite. Selection was originally based upon a combination of social origin and individual capacities (Bonoli, 2021; Merino, 2023). Despite the massification of USE in the second half of the 20th century, its structures still contain selective features difficult to reconcile with policies aiming at widening access to all types of audiences. The ongoing discussions surrounding the criteria for accessing general education schools at USE (grammar schools) or the selection of the most qualified candidates by companies in the context of dual apprenticeship in Switzerland serve as illustrative examples of this phenomenon (Hafner et al., 2022; Imdorf, 2018). Meanwhile, the generalization of upper secondary education and training comes with the demand of a higher level of qualification of the workforce. At the individual level, this demand turns into a further requirement in order to successfully enter a recognized position in the world of work and hence in society. Therefore, the elites have been able to reposition themselves and USE is still nowadays recreating patterns of reproduction of social inequalities that used to take place at LSE in the past, as Verdier (2001) has shown for France.

In parallel, if the right to education for all becomes part of the policy aims of USE, a major challenge is adopting pedagogical measures to ensure the completion of the program and to avoid the risk of early school leaving, particularly for those for whom compulsory education was already enough and for those whose schooling was abrupt or interrupted (Duc & Kammermann, 2024; Palomares-Montero & Marhuenda-Fluixá, 2024; Scharnhorst & Kammermann, 2020). Another question is whether a more inclusive education system guarantees a more inclusive society, and particularly a more inclusive labor market. It cannot be overlooked that these two systems, education and production, have different logics.

Our article analyses these issues by looking at Spain and Switzerland, which are faced with the challenges of inclusiveness and selectivity in their education systems, and which are responding in different ways due to their different VET models, that we can broadly refer to as the *Spanish school-led system* and the *Swiss dual system*.

2 Cf. among other data set: CEDEFOP 2020, indicators 24 and 25 ("Employment premium for Initial VET graduates").

In other words, we are going to explore the question of inclusiveness by analyzing the case of two countries, Switzerland and Spain, which offer two particularly interesting cases for reflection on the issues inherent to inclusion. On the one hand, the two countries have different VET systems, the former being organized predominantly on a dual basis, the latter predominantly on a school-based basis. Moreover, international statistical indicators also highlight major differences, particularly in terms of youth unemployment, early school leaving and the attainment of upper secondary qualifications, suggesting that the Swiss system could be more inclusive than the Spanish system. However, a more detailed analysis of how the two systems work allows us to nuance this initial interpretation and show how the two countries are both confronted with problems of inclusiveness, even though these manifest themselves at different levels and the two countries react to them with different measures.

It is important to specify that our perspective is institutional. We focus on the organization of the education system, with particular attention to VET, in order to highlight the structures, dynamics and logics that characterize its functioning and underpin the decision-making process in the field. Our article will not, for this reason, go deeply into the more specifically pedagogical aspects of inclusion, particularly in relation to the functioning or effectiveness of any specific measures adopted (Duc & Kammermann, 2024; Palomares-Montero & Marhuenda-Fluixá, 2024; Scharnhorst & Kammermann, 2020).

After clarifying the notion of inclusion and specifying three key moments affecting it (access to USE, achieving a USE qualification, access into the labor market or to further education), we present several international indicators that can help us compare the two countries and situate them in relation to the European average. This will be followed by a more detailed examination of the situation in each country to give a more accurate picture. Our conclusion allows us to return to the most important aspects of our analysis; particularly, how difficult it is to state that one of the two models is more or less inclusive or selective. It is clear that the Spanish and the Swiss models are confronted to different degrees and at different moments by the challenges of inclusion and selection, applying *filtering mechanisms* which help ensuring the smooth running of the system and safeguard its reputation: Gatekeeping seems to be stronger than facilitating access.

By considering the situation in Spain and Switzerland, our article adopts a comparative approach, with all the problems that comparisons entail in the field of VET (Evans, 2020; Georg, 1997, 2005; Grollmann et al., 2022; Li & Pilz, 2021; Pilz, 2012; Pilz & Li, 2020; Renold, 2020). At the international level, VET is characterized by great diversity (Billet, 2011; Renold, 2020) and the difficulty of finding universal concepts and of establishing appropriate criteria for comparison. As Ursula Renold (2020) points out, "it is difficult to define VET programs or VET systems as a transnational category. These systems are too different with regard to the social constructs of concepts and are most likely founded on different political economy concepts" (p. 33). To get around this problem, it is essential to "reduce the complexity of VET" and to try to develop "transnational concepts so that comparisons have a valid basis" (p. 33). These transnational concepts can be developed by identifying what Dubar et al. (2003) call "common problems" – problems, stakes, questions "with which all members and institutions would be confronted and which, historically, would have given rise to different answers according to the diverse and contingent configuration of the actors involved" (p. 61). In the following pages, therefore, we will fo-

cus on the general problem of inclusion as an issue faced by both countries. This problem will be analyzed at three different levels, raising challenges that, although contextually different, pave the way for a comparative analysis. A comparative analysis that, given the limits of the comparative exercise and the methodological choice of "reducing complexity", does not necessarily insist on the similarities that would emerge from the choice of this "common problem", but rather on the differences between the two countries that this perspective allows us to grasp better. With the words of Dietmar Frommberger (2004): "In this more limited context, comparing does not mean assuming or establishing similarity; instead, comparing means understanding, acknowledging, and accepting difference and not insisting on generally applicable conclusions" (p. 15).

2 Defining Inclusion

The European Commission tends to speak of inclusion as social inclusion and to link it to poverty and risk of poverty and a limited participation in social and cultural life; however, when defining it, education is not considered relevant to the issue[3]. When it comes to young people, social inclusion is addressed within youth policies (including housing, health, social and financial services), VET, if mentioned, is only a side dimension to it, not the central one. Inclusion is a social issue, not an education or qualification one.

The recently published terminology of VET (European Centre for the Development of Vocational Training , 2024) characterizes inclusion with adjectives like digital and social; related to equity. Inclusive education and training is defined as:

> Learning which ensures equal access and successful participation of all citizens – including those from disadvantaged groups – to promote their social and occupational inclusion […]. An inclusive education and training system requires appropriate structures and activities: learning opportunities (compensatory learning, special needs education, second chance education); incentives and human / financial resources; support (lifelong guidance, personalized learning) (European Centre for the Development of Vocational Training, 2024, p. 194).

Related terms in the same CEDEFOP volume are 'career guidance practitioner / career practitioner, compensatory learning, disadvantaged group / vulnerable group / group at risk, lifelong guidance, lifelong guidance system, social inclusion, social integration, second chance education, special needs education, vocational integration / occupational integration' (European Centre for the Development of Vocational Training, 2024, p. 194).

For the purposes of this article, we define inclusiveness as the capacity of a VET system to include the largest possible number of people into quality education or training provision at USE level and inclusion as the result of this capacity. By quality education we understand one that is conducive to an officially recognized qualification free of any stigmatization and with good value in the labor market.

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3 Cf. National policies plateforme: https://national-policies.eacea.ec.europa.eu/youthwiki/policy-fields/4-social-inclusion

Therefore, the inclusiveness of a system can be assessed by considering at least 3 aspects. First, in terms of access to USE, an inclusive system is able to provide VET for all young people, regardless of their conditions of vulnerability and marginalization (United Nations Educational, Scientific and Cultural Organization , 2005), and it presents conditions of access to various training courses that do not discriminate, create or prolong social inequalities. What is at stake here is the transition from LSE into USE, namely Transition 1 (T1). Second, an inclusive system must ensure that a relatively large number of young people successfully complete their training and attain a diploma while providing alternative transition solutions for those who cannot complete the ordinary ones. Third, an inclusive system is also one that offers diplomas that open good prospects for professional and social integration into adult life. What is at stake here is the Transition 2 (T2), the transition to the world of work or to further education or training (Chester, 2024; Raffe, 2013).

Our perspective on inclusion is thus close with the political sciences perspective, which draw its attention particularly on the balance between social and economic aims of education policies (Bonoli & Emmenegger, 2020; Gamboa et al., 2024), and on issues like stratification and selection, codependence and/or state intrusiveness (Durazzi & Geyer, 2022). VET, in its traditional understanding, aims at preparing young people for the world of work and therefore reflects inevitably the competitive and selective feature of the labor market. In contrast to academic USE, which is a continuation of the LSE school logic and aims to pave the way for entry into academic higher education, VET is positioned at the crossroads of the educational and productive systems, it is an educational offer that is traditionally aimed to prepare young people to leave the educational system rather than to continue in it directly . Until recently, it was intended to bridge education and work. Nowadays, in most countries, it has also become a gate for further and higher (vocational) education. For this reason, we can say that the challenges for VET are particularly complex: VET must satisfy both the internal objectives of the education system and the external demands of the labor market, while academic education is free from this double demand and pressure (Gonon, 2014).

We can then rephrase our question into the extent to which a VET system can maintain and foster inclusion before the demands of the labor market, while at the same time offering programs that integrate certain people or groups of people that the labor market might be ready to discriminate.

3 How Well Prepared is VET at USE to Achieve Inclusion? Should we Expect Differences Between Dual and School-Based Systems?

In recent years, public education policies have focused on VET both for economic reasons (to improve the skill levels of the national workforce) and for social reasons (to combat unemployment, particularly among young people, and to promote the broad inclusion of all sections of the population in USE-level training)[4]. From a political point of view, youth

4 Cf. the initiatives related to the European Vocational Skills week: https://vocational-skills.ec.europa.eu/

unemployment has become the most quoted indicator to evaluate the effectiveness of a system. This might also be considered as a sign of its potential of inclusiveness.

The resistance of countries such as Germany and Switzerland to the 2008 financial crisis placed their dual apprenticeship model at the center of international debates, portraying it as a miracle recipe that would not only provide skilled workers, but also help to control youth unemployment[5]. The dual model is often referred to as the best anti-youth unemployment measure that could be transferred from these to other countries to solve the problem of youth unemployment (Gessler, 2019; Jäger et al., 2016), and there have been important attempts to do so, as the topic of internationalization of (German or Swiss) dual VET indicates (Gessler et al., 2019; Jäger et al., 2016).

International data, like Eurostat , show a kind of correlation between a low level of youth unemployment and a higher share of dual VET. But these international data are difficult to interpret, and it is not easy to establish a direct causality between dual model and low youth unemployment. Many parameters influence this indicator: the general functioning of a state's economy, the length of compulsory education, the available structures for transitions school-to-work, or the supply of full-time school education at USE, among others.

The caution with which we must read these data is also justified by several studies which clearly show the selective nature of the dual model, which tends to exclude the vulnerable profiles from its programs (Hupka et al., 2010; Imdorf, 2009). Due to the large participation of companies, the dual model reflects the selective logic of the world of work, and it can only work properly if companies agree to participate and have a direct interest in the training of apprentices[6]. In practical terms, this means that companies need to have the possibility to choose their future apprentices among young people with strong profiles. This selection is one of the decisive elements that ensures that companies can make a profit from their investment of time and money in training an apprentice, as cost-benefit analysis indicate (Gehret et al., 2019).

The alternative model for offering VET at USE level is represented by school-based systems. This model may offer advantages in terms of the inclusiveness of the system, insofar as the conditions of access can be established by national education policy and facilitate access to such training even for young people who would not get an apprenticeship contract in dual systems. School-based VET systems may have proved more able to continue training at a time where apprenticeship vacancies were scarce, both in the 2008 crisis as well as in the 2019 one; that is clearly seen in Spain, where the offer of VET schools and enrolment of students grew during both crises, as limited or reduced activity in companies does not result in less training positions.

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5 Cf. the documentary "Le miracle suisse: la recette anti-chômage", made by France 2 in 2012, broadcast as part of the program "Un oeil sur la planète".

6 Here we see a kind of tension emerging between an economic rationale, which characterizes the economic expectations of companies, naturally looking for the most productive employees, and a pedagogical rationale, which promotes the work-based learning model as the ideal solution for young people with non-academic profiles. Managing this tension is by far one of the greatest challenges facing dual models of VET.

However, this model also has disadvantages compared to the dual model, including higher costs to society, insufficient or inappropriate practice-oriented teaching, a greater risk of a mismatch between the qualifications taught and the actual needs of the job market, with the corollary risk of having diplomas that are hardly recognized on the job market.

In this paper, we take a closer look at these two VET systems in relation to their inclusiveness potential, based on the three dimensions we mentioned earlier: T1, completion of VET at USE and T2. To focus our analysis, we will address mainly initial VET and some VET programs preparing for initial VET. VET at tertiary level is out of our scope.

The cases of Switzerland and Spain are ideal for such an analysis. Switzerland, with a long tradition of the dual model, is currently the European country with the highest rate of young people in this type of training and at the same time it is among the countries with the lowest youth unemployment rates. The Spanish VET system is quite different. It can be described as a *school-led system*, without being a fulltime-school system, since VET programs integrate also work-based learning. The Spanish VET has grown stronger in recent decades. However, Spain has one of the highest youth unemployment rates in Europe.

A first question is whether comparing these two systems enables us to identify specific characteristics of their inclusiveness. The question here is if one of the two models can be considered more inclusive than the other. While a definitive answer is hard to achieve, our analysis will enable us to highlight the different mechanisms and the advantages and disadvantages of both.

Our analysis will also lead to highlighting the key role played by companies in determining the inclusiveness of a VET system, whether in terms of the apprenticeship or traineeship positions offered for learners or in the provision of suitable jobs for VET graduates. In this perspective, a school-led system could result less selective then a dual-model, but that does not mean that the labor-market is also less selective and T2 can prove very difficult. On the opposite, T2 in dual-model systems is often considered as relatively smoother (Steedman, 2012).

Our analysis will show some differences but also some analogies between the two countries. The main finding of our analysis is that both systems, beyond their very different organization, are exposed to similar problems concerning T1. In both countries, we find a form of filtering which, ensures smooth running of the programs at USE on the one hand, with the side effect of more selection on the other. As we will see, in Switzerland, this filtering is achieved through the selection of apprentices by companies, a selection which is particularly discriminating young people from immigrant backgrounds or with poor school results. In Spain, the filtering is ensured by the diploma on compulsory secondary education, a prerequisite for accessing USE. The remainder of this article will provide a more detailed description of this filtering process and its role in both systems.

4 Spain and Switzerland: Significant Indicators

Even if the data available for comparing education systems are relatively limited, and when they exist must be taken with great caution (Rambla & Bartolini, 2023), we find

useful to refer to a series of indicators drawn up by CEDEFOP, Eurostat and OECD to try to describe the general situation in these two countries, and to position them in relation to international averages (Table 1).

Table 1: Choice of Indicators Spain – Switzerland

Indicator	Spain	Switzerland	International values
1. Population (2024) *	48 610 458	8 960 800	449 206 579 (EU27)
2. Pupils enrolled in USE (2022) *	1 897 577	349760	18 229 991 (EU27)
3. Proportion of USE pupils out of all young people aged between 15–19 in (2022) *	75.8 %	82.7 %	78.6 % (EU27)
4. VET students as % of all USE students in (2022) *	39.1 %	61.1 %	49.0 % (EU27)
5. Dual VET students as % of all VET students in (2022) *	2.6 %	90.8 %	24.6 % (EU27)
6. Initial VET students with direct access to tertiary education as % of all USE Initial VET (2021) **	58.0 %	92.6 %	71.7 % (EU27)
7. At least USE educational attainment, age group 20–24, (2023) *	79.0 %	88.3 %	84.1 % (EU27)
8. Early leavers from education and training (2021) **	13.3 %	4.9 %	9.8 % (EU27)
9. Unemployment rate for 20–34 years old (2022) **	17.2 %	5.0 %	8.5 % (EU27)
10. Employment rate for recent Initial VET graduates, age group 20–34, (2022) **	65.7 %	84.8 %	79.7 % (EU27)
11. Completed USE by theoretical duration plus two years. Total USE (2021) ***	81 %	91 %	82 % (OECD)
12. Completed USE by theoretical duration plus two years. Vocational track (2021) ***	63 %	90 %	73 % (OECD)

*Source: Eurostat online data base, (EU27). **Source: CEDEFOP online data "Key indicators on VET". ***Source: OECD 2023, Education at a Glance.

These indicators show at first the differences in the size of our two countries, Spain having more than 5 times as many inhabitants and people enrolled in USE than Switzerland. Then they show differences in the organization of USE: Switzerland has a higher share of young people attending USE programs, and a much higher share of learners in VET. The difference is even bigger if we consider the rate of learners in dual model VET (90.8 % against 2.6 %), a rate which confirms the different nature of the two systems: dual on one side and school-led on the other. These data show also that Switzerland has

a higher rate of Initial VET learners who have direct access to tertiary education than Spain, with a rate well below the EU average.

It is therefore worth considering the educational attainment in the age group 20–24,where Switzerland has a higher rate than Spain. At the same time, the rate of early leavers is higher in Spain than in Switzerland, as well as the unemployment rate (20–24). Data show also that after completing Initial VET, 84.8 % of the graduates in Switzerland are in employment, against 65.7 % in Spain. Finally, data on the duration of USE programs show a higher rate of learners succeeding in the theoretical duration plus two years in Switzerland than in Spain.

These data give us an initial picture of the situation in the two countries. However, it is extremely difficult to make general judgements about the functioning of a particular system solely on the basis of such indicators. And it is particularly difficult to deduce from these indicators how inclusive a system is. Switzerland scores better than Spain on several of these indicators, even though Spanish data are improving relatively fast since 2013[7]. But does this also mean that the Swiss system is more inclusive than the Spanish system? And that a system based on the dual model is more inclusive than a school-led one?

To answer our questions, we need to deepen our analysis and to go into the details of how the two systems work. This will allow us to grasp the nuances that are not apparent from these international indicators.

4.1 The Challenges of Inclusion for Spanish VET

4.1.1 Access to VET in USE

In Spain, T1 starts at the age of 16, when students can choose between the academic and the vocational path at USE. This choice is only for those who have achieved the General Certificate of Secondary Education (known as GESO, its Spanish acronym standing for *Graduado en Educación Secundaria Obligatoria*). This is a requirement without which no further education within formal education is possible, neither in the academic nor in the vocational pathway.

To facilitate achievement of that Certificate[8], a comprehensive LSE has developed five different pedagogical measures that most secondary schools adopt: 1) individual curricular adjustment; 2) curricular diversification; 3) basic VET, a vocational offer for those students older than 15 who have little prospects to achieve the GESO; 4) the so called PROA+ program[9], a nationally funded program for schools in very complex contexts, with the aim to facilitate the educational success of students with a vulnerable condition; and 5) guidance provided by secondary schools, often addressed to facilitate the continuation of their studies if they comply with the requirements.

Given that the entry requirements for academic and vocational paths are equal, most students and families choose to take the academic one, with the expectation of better

7 Cf. Eurostat data, 2013.

8 Spain has the highest repetition rate in LSE of all of Europe, 8,6% (Ministerio de Educación y Formación Profesional, 2023, 24)

9 Programa para la Orientación, Avance y Enriquecimiento Educativo, its full name in Spanish.

prospects. National and regional policies have been struggling to promote VET at the USE as this was a demand of the productive system, to have a workforce with more vocational qualifications (Merino, 2023).

Since the surge of the 2008 financial crisis, formal VET has improved its prestige and attractiveness. The VET offer at USE level has almost doubled in the past decade and the demand for VET is increasingly growing, resulting in students not being able to opt for the vocational qualifications of their choice and, as a side effect, for a rapidly growing business of private VET providers and schools, paradoxically when the country policies apparently go in the direction of more company involvement to provide practical dual training.

On the other side, young people without GESO cannot follow these standard transitions from LSE and USE. They have to go through "de-standardized" transitions outside the formal education system. For these groups three options are available: a) entering a non-qualified job, often under precarious and temporary conditions; b) becoming a young person neither in education nor in employment or training; or c) joining either an LSE program called Basic VET or one of the many non-formal VET programs.

In 2022, 13.9 % of Spanish youth were not able to proceed to USE[10] (Ministerio de Educación y Formación Profesional, 2023, p. 33) and were considered early school leavers from education and training[11]. These data show that LSE measures are not enough and do not achieve their aims although they have improved, as in 2012 this proportion was of 24.7 %. Official data are scarce and hard to interpret properly for the lack of sufficient information, and therefore we find discrepancies between those announced by Eurostat, official Spanish sources (Ministerio de Educación y Formación Profesional, 2023) and recent research relying on them (Salvà et al., 2024).

This applies to both formal and non-formal VET, where there is a wide offer which is, however, unstable, short-term, funded through a variety of mechanisms and run by diverse VET providers that make it impossible to register data of the offer, attendance and success. There are no official data for enrolment nor for offer in non-formal VET. This is, however, the only chance for all those young people that do not achieve the GESO and cannot therefore remain in the formal education system.

4.1.2 Achieving a Qualification

As stated above, the efforts taken at LSE to increase registration in VET at USE have proved effective, so that between 2012 and 2022 there have been clear improvements: in 2012 only 63 % of the population aged 20–24 had at least a USE (ISCED 3) according to Ministerio de Educación y Formación Profesional (2023, p. 26), these data had risen to 79 % in 2022, as shown in table 1.

As initial VET competes with academic USE, many opt to follow the academic path under family pressures, but they may realize to be unable to follow this route and may drop out, perhaps choosing a VET qualification at a later stage. Among those whose first

10 This and other data correspond to schoolyear 2022/2023. Source: https://www.educacionyfp.gob.es/dam/jcr:f36ffb54-2052-43d5-a0a2-e4d96b2a5b2f/datos-y-cifras-2022-2023-english.pdf

11 The percentage of the population aged 18 to 24 having attained at most LSE and not being involved in further education and training.

choice is VET, most attend it in a VET school near the family home. A single VET school does not usually offer a very wide range of qualifications, many schools have an offer of qualifications that demand low investment in machinery and infrastructure. Therefore, there are many students enrolled in a qualification that is not so appealing to them (Merino, 2023), which may have an impact on their motivation to complete the course.

Even though, there are no official data on students leaving a vocational qualification, specific studies show a considerable amount of dropout with huge variations according to regional and occupational differences, and among student profiles too: migration background is a clear factor of higher dropout and of not achieving the vocational qualification.

The most comprehensive and updated study on this issue identifies three main reasons (Salvà et al., 2024): individual and family features (educational and economic conditions, family support, low self-esteem, gender and nationality); the organization of education (low performance, lack of chances to study their first vocational choice, lack of guidance, no bond to teachers and too large groups) and labor market (hiring unqualified youth and low expectations to improve career prospects).

However, in another recent study, Gamboa et al. (2024) state that VET is more inclusive at USE than the academic pathway, given that the enrolment of potentially vulnerable people like migrants, people with disabilities, people in rural areas or women is higher. Anyhow, these authors are clear that basic and initial VET are inclusive, though that is not the case of VET at the tertiary level.

This inclusiveness of VET at USE can also be interpreted from a different view: Merino (2023) takes a sociological viewpoint to offer an explanation for this situation where certain social groups are overrepresented in comparison to the academic path at USE. Merino shows with data that there are many more students in VET at USE whose parents do not have an academic USE or tertiary diploma. Therefore, he speaks of a discriminatory effect of inclusion in VET, and he states that VET is still a USE choice considered for certain social groups, as if it would still be the choice to educate the working class.

4.1.3 Access to the Labor Market

Compared with data of the previous decades, T2 performs rather well; however, Spain still has room for improvement in international comparisons. In year 2022, unemployment rates of the population aged 25 to 34 (Ministerio de Educación y Formación Profesional, 2023, 37) were of 28.1 % for youth with primary or lower education, decreasing to 21 % for those with LSE and to 16.1 % for those with USE. In the case of tertiary education, the rate goes down to 10.2 %. The overall youth unemployment rate is still very high, 17.2 %[12]; though significantly lower than in 2012, when it was 53.2 %.

Youth unemployment has been and still is a huge problem in the country, particularly for those of migrant origin (Consejo Económico y Social, 2019). Diverse studies have detailed particular features such as overqualification and displacement of people with lower qualifications (Consejo Económico y Social, 2020), difficulties to enroll in lifelong learning (Montero, 2022), and precarization of the labor market (Comisiones Obreras,

12 Cf. Eurostat data, 2012.

2023). There have hardly been official longitudinal studies on transitions, and these have been interrupted so that they are outdated and relatively useless nowadays.

If we consider transition into tertiary VET after successfully completing VET at USE, the Ministry of Education and VET offers data on enrolment showing that between 2012 and 2022 access from VET at USE into tertiary VET has almost doubled. There are little doubts of the increased employability of tertiary VET graduates, but the labor market may still make greater efforts at several levels: According to Salvà, Moso and Quintana (2024), using data from 2017, one out of four employments in Spain are for tertiary VET (25.48 %), while only one out of seven for VET at USE (14.84 %). These data would explain why access to the labor market after VET at USE is so hard and scarce; while these data also provide a contrast to the complaint of companies about difficulties to find appropriately qualified workers, given that their offer is not that wide for VET qualified people, neither at tertiary nor at USE level: it is widely assumed that the workforce in the Spanish labor market faces too many overqualified and unqualified jobs, and there are not so many offers for VET qualified jobs.

There are however companies that care to provide VET qualifications, even if rather for lower than higher level. Efforts have been taken through three kinds of legal support for companies: a) Special Employment Centers hiring people with disabilities, qualified and unqualified, providing them training and support; b) Work Integration Enterprises, hiring vulnerable and low qualified people (young people unqualified, migrant origin, people who were in prison, had trouble with addictions, homelessness, etc.) with the aim to qualify them and equip them with a validly recognized vocational qualification within a timeframe of three years (Marhuenda-Fluixá et al., 2020); and c) Job Enclaves for people with disabilities (Salinas-Tomás & Marhuenda-Fluixá, 2020), who find training support in ordinary companies, though not aiming to any specific vocational qualification.

A related issue, anyhow, is whether these measures facilitate access to a non-dualized, non-fragmented, non-precarious labor market, and whether the training and support provided in such measures facilitates access to qualified or to low or non-qualified employment. We should bear in mind that inclusion in adult life is not only active participation in the labor market, but also in other domains of life.

This is particularly relevant because the labor market is characterized by strong unemployment rates and precarization, a trend only reversed through reforms initiated in 2019. The fact that several VET and employment initiatives have been promoted by the civil society indicates, on its side, that companies apart from those part of the social and solidarity economy are not interested in employing people with difficulties unless they get a reward under the form of subsidies. Training is still a missing value in entrepreneurial culture in Spain.

4.2 The Challenge of Inclusion for the Swiss VET

4.2.1 Access to VET in USE

In Switzerland, T1 raises several problems. Existing restrictions on the transition between LSE and USE create a filtering effect which leaves on the sidelines young people with lower educational performance or young people with a migratory background (Scharnhorst & Kammermann, 2020).

On the one hand, access to gymnasiums is limited to LSE leavers with the best grades. In some cantons, there is also a clear political will to restrict access to this type of training and to keep it below 20 % of young people in each cohort (Hafner et al., 2022).

On the other hand, access to VET does not depend on obtaining a LSE qualification or a certain grade. However, in practice, young people with poor LSE grades or without a LSE qualification find it more difficult to find an apprenticeship position (Imdorf 2007, 2016).

According to recent data, 21.7 % of young people do not make a direct transition from LSE to USE. 12.1 % are in a temporary solution waiting for a suitable apprenticeship position, which often takes at least a full year for most young people, sometimes even longer (Swiss Federal Statistical Office, 2024).

These data show that T1 is not easy in Switzerland. Many young people cannot follow the program they would like to, whether access to a Gymnasium or an apprenticeship they would like to do. The factors affecting this situation are restricted access to Gymnasiums; lack of control over the supply of apprenticeship positions; freedom of companies to offer apprenticeship positions and to choose apprentices; and limited alternative outside Gymnasium or apprenticeship (Hafner et al., 2022; Imdorf, 2007, 2016; Scharnhorst & Kammermann, 2020).

This situation creates very strong competition to enter academic USE or to find the best apprenticeship positions. This competitive situation puts specific social groups in difficulty with a clear discriminatory effect. This makes T1 particularly difficult for young people from disadvantaged social groups: young people with lower school grades; migration background; parents without USE diploma; and, for certain occupations, young women too. At the same time, the pressure is high on young people to accept second-choice solutions, running the risk to interrupt training before its conclusion (Lamamra & Masdonati, 2009).

These transition problems are relatively well known, and many measures have been put in place to try to solve them (better career guidance, temporary solutions, creation of a certificate with reduced requirements, etc.). However, most of the measures do not affect the selective nature of the dual system. Instead, they focus on better preparing vulnerable young people to succeed in the selection process, helping in this way to reduce the negative impact of the selectivity of dual apprenticeships. Bonoli and Wilson (2018) speak of "external measures" that try to improve the inclusiveness of the system, without touching its main characteristics (selective nature, autonomy of the companies), but trying to adapt or to better prepare young people to the existing conditions. This is particularly true if we consider the temporary solutions offered by most cantons for young people who are not enrolled in a USE program after the end of LSE. These temporary solutions, which are not integrated in the formal education system and do not lead to an official certificate, are mainly school-based and aim to help young people choose a future occupation, compensate for deficits in their school education and prepare them for job interviews so that they can successfully get an apprenticeship offer the following year (Scharnhorst & Kammermann, 2020). This VET policy means that the system does not have to take structural and far-reaching measures to improve its inclusiveness and, above all, companies are not obliged to change their practices and to increase their commitment to a more inclusive system (Bonoli & Emmenegger, 2020).

4.2.2 Achieving a Qualification

While T1 clearly represents the critical moment in the Swiss education system, the course of education leading up to the award of a degree is relatively positive. Longitudinal statistics show that 90 % of young people who entered USE in 2011 obtained a diploma within 5 years (Swiss Federal Statistical Office, 2018). If we look in more detail at the graduation rate for young people following a three-year initial VET program, we can see that 74 % obtained their diploma without any loss of years, 9 % did with a repetition year, and 5 % with a reorientation, interruption or after a first failure at the exams (Swiss Federal Statistical Office, 2018).

While these figures may seem positive, the relatively high rate of apprenticeship interruption should not be overlooked. Statistics from 2022 show that 23.5 % of young people starting an apprenticeship experience a break in their training (Swiss Federal Statistical Office, 2022). There are many reasons for these, from a bad choice of vocation on the part of the young person, who realizes that the chosen vocation is not for him or her, to problems with the company's trainers, which make it impossible to continue training (Kriesi et al., 2016). For a significant proportion of these young people, training is quickly resumed in another occupation or another company, but this period can also extend over several years.

Interruption of a training pathway is not per se a problem. It is perfectly normal and desirable to have the opportunity to change training pathways. It becomes a problem when the interruption rates become significant, revealing a problem both in terms of the choice and therefore the guidance that young people have received and in terms of support in the company, relating to apprenticeship conditions in companies, control on them as well as the preparation of trainers in the companies (Duc & Lamamra, 2022).

While an average interruption rate of 23.5 % is not considered alarming in Switzerland, as similar rates have also been recorded for general education courses (Kriesi et al., 2016), it is certainly worrying in certain occupations where the rate rises above 40 %, for example in occupations like caulker, plasterer/drywall builder or building cleaner, to name a few (Swiss Federal Statistical Office, 2022).

Despite these problems, the Swiss education system enables a high proportion of young people to obtain a diploma at USE level. Current Swiss statistics (Swiss Federal Statistical Office, 2024) show that 91 % of young people obtain a USE diploma before the age of 25, one of the highest rates at international level: Eurostat shows a rate of 88.3 % of educational attainment against a rate of 84 % for EU 27.

Obtaining a USE diploma before the age of 25 is the result of a strong commitment on the part of all players in the Swiss education system. Since 2006, the confederation and the cantons have stated their intention to achieve a graduation rate of 95 %, which is not yet the case. It is also interesting to note that this rate also points to a problem with the inclusiveness of the Swiss system. If we look at Swiss young people born in Switzerland, the rate is already 94 %, whereas the rate for those born abroad drops to 72 % (Swiss Federal Statistical Office, 2024). These figures clearly show that the Swiss system has difficulty integrating young people with migration background and enabling them to obtain a USE diploma.

4.2.3 Access to the Labor Market After Upper Secondary VET

If we look closely at the Swiss system, we can recognize that T2, between USE and tertiary education or the world of work, is working well, especially in international comparison. The good data at this level have contributed to the reputation of the Swiss system as a model that ensures an easy transition between the world of school and the world of work, and the Swiss society and politics are highly satisfied with this picture, even though the academic world is far more critical (e.g., Bonoli et al., 2018; Duc & Kammermann, 2024).

Data on youth unemployment provide initial indications of T2. More precise longitudinal data also show that 84 % of young people who obtained an initial VET diploma in 3 or 4 years are either in training or in employment within six months of obtaining their diploma. This rate rises to 92 % after 42 months, with only 2 % of young people registered as unemployed (Swiss Federal Statistical Office, 2018).

Although these data are particularly positive, especially at international level, we must be careful not to conclude that the Swiss system is highly inclusive. These data tend to hide the high level of selectivity at T1, the consequence of which can be seen in the difficulty vulnerable young people have in making that transition. The dual system can work well only if companies can play their chances and look for competitive profiles (Muehlemann & Wolter, 2014). Of course this leads inevitably to the exclusion of less competitive profiles.

Based on these elements, we can state that, the dual model does not appear to be a particularly suitable tool for inclusion, since it tends to exclude vulnerable young people, as they are considered less "suitable" (Muehlemann & Wolter, 2014) by the companies. But we must also consider that this exclusion of vulnerable profiles has a, so to say, "positive effect" on the very functioning of the Swiss dual apprenticeship system. It acts as a kind of filter, blocking 'unsuitable' young people at T1 level and allowing only more competitive profiles to enter the dual system: a filtering which naturally meets the interest of the companies and, *de facto*, increases the chances of these more competitive profiles of successfully completing the apprenticeship and finding a job after graduation.

Despite these selection issues in T1, the overall Swiss data are relatively robust, particularly when viewed in an international context, as demonstrated by the indicators presented in Table 1. The VET system, as the general education system, can offer training to many young people, leading them to a USE diploma, which opens the door to further training or to the labor market. This remains true even though it is highly selective, especially around T1. Here, we encounter a certain paradox.

One possible explanation could be the high demand for apprentices. The fact that the curricula are clearly geared to the needs of companies encourages Swiss companies to engage in the dual model in order to ensure the succession of qualified internal labor and the shortage of qualified labor in Switzerland has been such that companies have had to train not only young people with highly competitive profiles, but also young people with less competitive profiles. This produces certain inclusion effect: also, vulnerable profiles have had the chance to find an apprentice position. They might have to wait one or two years to find a suitable training, running the risk to interrupt their apprenticeship once or twice, but, in the end, a large majority of young people obtain a USE diploma. The problem that arises is whether and how these indirect effects can be stimu-

lated, and whether Swiss education policy is in a position to control these indirect effects, or whether it simply leaves them to the goodwill of the market and companies.

5 Conclusion

VET in both Switzerland and Spain has nowadays a relatively good reputation, a long standing one in the case of Switzerland, and one that has increased significantly in the last three decades in Spain. Selection in access seems to be one of the reasons for such prestige, set by companies in the Swiss system and by the GESO in the Spanish one.

Our analysis reflects a debate that has been recently tackled by European institutions, like the one held by CEDEFOP in October 2024 named 'excellence and inclusion at the crossroads', although excellence has greater visibility than inclusion[13].

If we take a step back and consider the two cases presented in the previous pages, the following ideas can be concluded: both countries find major problems in T1; both countries face tensions between reputation and inclusiveness of the system, although these are addressed differently; both tend to externalize measures that remain in the margins of VET to preserve the prestige of the system; which results in both the Swiss dual and the Spanish school-led system being capable to improve their inclusiveness at the institutional level. We explain each of these conclusions below.

Despite their differences, both countries present major problems when considering T1, i.e. access to USE programs, whereas obtaining a diploma and the T2 seems to raise less difficulties. This result is surprising for Switzerland, since international indicators did not point to such a problem, and they indicate a filtering action that is evident in the case of Spain, as it is legally regulated.

It is worth taking a closer look on that blind spot of international indicators. The choice of indicators at international level is particularly influenced by the many countries that have a school-led system and for which the major challenges in the transition between the world of education and the world of work manifest themselves at the level of T2 and not T1. This is generally not considered as problematic insofar the supply of schooling easily covers the demand for training and public policies allow inclusion in school training even for young people with difficulties. Symptomatic of this is the fact that none of the 54 indicators selected by CEDEFOP[14] refers directly to the difficulties that young people might have in accessing training at USE level.

Against this backdrop, with indicators that focus predominantly on T2 and obtention of a diploma, it is not surprising that the picture of the Swiss system does not reveal problematic areas. But this first finding is also surprising for the Spanish system, because as a school-led system, we expected greater ease in T1 for all young people coming from LSE, in the hope that the system would be inclusive by default.

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13 https://www.cedefop.europa.eu/el/events/future-vet-excellence-and-inclusion-crossroads The hashtag #VETExcellence goes by #FutureofVET, while there is no hashtag for inclusion

14 Cf. Cedefop Key indicators on VET: https://www.cedefop.europa.eu/en/tools/key-indicators-on-vet

However, what is particularly interesting to note is that beyond this common problem, the reasons for its emergence in Switzerland and Spain are profoundly different. In Switzerland, the difficulties of T1 are a combination of two factors: restrictive policies on access to USE general education and a system of selection of apprentices by companies, which leaves out vulnerable young people.

In Spain, the problems at T1 are linked to the conditions of access to USE, both general and vocational, which require an LSE diploma, which de facto excludes young people who do not achieve this certificate from any further formal education.

In Spain, however, the introduction of such a condition of access to USE courses was motivated by the desire to improve the reputation of VET programs; in this regard it has been a success in recent decades. On the Swiss side, it should be noted that the selective nature of the system, which stems directly from the freedom of companies to choose if they want to train and to whom they want to train, also helps to ensure the reputation of the dual VET system: companies can choose better prepared young people and, as a result, also achieve very good training results, which has a positive effect on the sector as a whole. But, as we have seen, this also has the effect of excluding young people who are not so successful.

In the light of these considerations, we can ask ourselves whether VET policies at USE still gives more value to the reputation of the system than to its inclusiveness, as seems to be the case in the two examples we have dealt with in this paper. If this is the case, we can understand the selection at this level as a desired effect of this struggle. But here we find some kind of contradiction, because at the same time the demand for inclusiveness has been placed on VET at USE rather than on its alternative, the academic pathway at USE, which remains an elitist pathway. This kind of contradiction emerges clearly from educational policies in several Swiss cantons, where academic USE is considered an elite pathway and VET is seen as the most appropriate offer for learners with certain difficulties, but at the same time, access to VET remains difficult for exactly these types of learners. Anyhow, the role of VET in the economy and the expectation of providing properly qualified workforce to contribute to the advancement of the economy through productivity and competitiveness seems to be more relevant than the social function VET might fulfill. It is perhaps for this reason that both Switzerland and Spain, aware of the selection mechanisms, propose external measures to mitigate the inclusion problems they encounter, as we explain hereafter.

It is worth noting that in both systems, external non-formal solutions are put in place to try to recover the young people who are initially excluded by formal training. In Switzerland, these young people have the opportunity to follow temporary solutions, programs designed to help them improve their profiles so that they have a better chance of finding an apprenticeship. In Spain, these young people can follow non-formal training courses designed to help them integrate into the world of work, without however receiving a diploma recognized by the formal education system. Even if these non-formal solutions in both countries are of different nature and have different effects, both systems have established them as external measures, allowing them to avoid intervention in the internal structures of the system, while protecting at the same time the quality and reputation of their VET at USE.

However, these extra-systemic solutions can be criticized in both countries. In Switzerland, various cantonal education policies are explicitly aimed at encouraging direct access to training leading to a USE qualification, thereby reducing the number of people in these transitional solutions. In Spain, the new VET law in 2022 opens the door to possible recognition in the education system of qualifications acquired in these non-formal training courses.

We can't avoid coming back to the comparison we proposed between a system based on a dual model and a system based on a school model. Our analysis of the situation in Spain and Switzerland shows that, from the point of view of the inclusiveness of the system, both models face problems, even if their origins are different. Our article therefore does not allow us to conclude that one model is superior to the other in terms of inclusion. Even if the Swiss system is clearly better considered than the Spanish one in international comparison, when it comes to their inclusiveness, both could do much better, even Switzerland (Duc & Kammermann, 2024).

To conclude, we want to reconsider the exercise of international comparison itself and the challenges it poses. It has been particularly difficult to find aspects that lend themselves to direct comparison between the two countries, beyond a few general points of reference. The issue of inclusion, analyzed on the basis of the three levels, constituted the "common problem" (Dubar et al., 2003), providing us with the general framework within which to construct our comparison. However, each time an in-depth analysis of a particular aspect has revealed profoundly different institutional, economic or cultural conditions, it has been difficult to find analogies that would allow the comparison to be maintained at a more detailed level. For this reason, we have refrained from a systematic point-by-point comparison, preferring instead a general description of the situation in the two countries based on these three levels. This enabled us to show the emergence of the issue of inclusion in two profoundly different contexts and to note the equally different reactions of the two systems.

We believe that we have been able to show how two countries with very different characteristics are confronted by the challenges of inclusion in their respective education systems. This is a pressure that comes from outside VET and that is related to the expansion of USE, for which VET is demanded to be more inclusive than the post-compulsory academic pathway, where elitism and selection are not under question. We have also shown that these challenges do not necessarily appear where we might have expected to find them, especially if we were to rely solely on statistical indicators and international typologies. In this way, we hope to have contributed to advancing the debate on the challenges of inclusion and selection of VET at USE and providing new elements to understand these challenges.

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