

PERSPECTIVES OF YOUNG PEOPLE ENROLLED IN APPRENTICESHIP COURSES IN PORTUGAL ABOUT LEARNING IN WORK CONTEXTS

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Abstract

This paper is grounded in a research project about apprenticeship courses in Portugal. The analysis conducted aims to grasp whether on-the-job learning might constitute an advantage to apprenticeship courses that could contribute to improving the social image of initial vocational education and training (IVET) in Portugal. We want to understand the matter from the standpoints of young apprentices, focusing on their experiences with on-the-job training. The results were analysed within the expansive–restrictive continuum of Fuller and Unwin (2003), adapted to the Portuguese context. The project uses a mixed methods research design. A survey was conducted and semi-structured interviews were held with young apprentices. The survey was carried out online across the nation and resulted in 620 valid and relevant responses. The interviewed apprentices (54) were enrolled at nine training centres near Porto, Northern Portugal. Appraisals in the survey of the work-context training component of the apprenticeship courses were mainly positive. Nonetheless, data from the interviews revealed both expansive and restrictive features of workplaces that influenced learning outcomes. While apprenticeship courses have existed in Portugal for a long time (34 years), the cultural change to employers' views regarding work-based training can be considered to be still in progress. The results of the study support both the perspective that there is still a lot to put in place in order to change the social image of apprenticeship courses and IVET in Portugal through work-context training and also the idea that several ongoing changes are promising.

Keywords

IVET, apprenticeship courses, Portugal, work-context training, expansive–restrictive learning

Introduction

Apprenticeships have their roots in the concept of learning by doing and master–apprentice relationships (Christman, 2012). Apprentices not only learned a particular occupation but also were supported in the transition to adulthood by a master craftsman who was expected in addition to teach “character, morals, ethics, and integrity” (Christman, 2012, p. 23). Apprenticeships have increasingly evolved into more formalized models constituting official and contractual relationships between a company and the apprentice and a training centre or vocational school. Several countries in Europe, and such others as Canada, the USA, and Australia, have experience with apprenticeships (see Bunting & Moshuus, 2017; Deissinger, Heine, & Ott, 2011; European Commission & IKEI, 2012; Hogarth, Gambin, & Hasluck, 2011; Lehmann, Taylor, & Wright, 2014; Ryan, 2000; Sappa, Choy, & Aprea, 2016; Walden & Troltsch, 2011). As examples, we may mention the German dual education system, which has been a model for dual vocational education and training (VET) for many countries, including Portugal, and the Modern Apprenticeship programme in the UK, which is state-funded, as is the programme in Portugal (Dismore, 2013). Apprenticeship courses (ACs) are how dual VET is implemented in Portugal.

Apprenticeships combine learning in a workplace with learning in an educational institution. They are intended to provide an integrated form of learning that supplies apprentices with knowledge and skills related to an occupation as a way of getting young people “quickly and effectively” into the labour market (Hampf & Woessmann, 2016, p. 1). According to Sappa et al. (2016), “learning from multiple sites and sources needs to be purposefully connected and integrated to construct meaningful knowledge and understandings for Vocational Education and Training” (p. 283). These authors defended the idea that to train flexible workers capable of transposing vocational knowledge and skills to different work environments, it is important to form a connection between classroom and workplace learning. They added that “the transfer of what is learnt at school to the workplace is not automatic, mechanical nor unproblematic. On the contrary, it implies complex processes of ‘recontextualization’” (Sappa et al., 2016, p. 284). In this sense, the more “expansive” (Engeström, 2001; Fuller & Unwin, 2003) a learning context is, the higher its potential for successful vocational training.

Fuller and Unwin (2003) proposed an expansive–restrictive continuum to analyse the learning environments of the UK’s Modern Apprenticeship programme. They drew on the theory of *situated learning* from Lave and Wenger (1991) as well as the notions of legitimate peripheral participation and communities of practice, which refer to how apprentices become full participants in a given activity through learning and identity formation.

Lave and Wenger's theory did not attribute a high value to formal education in apprentices' learning processes, which was the main shortcoming pointed out by Fuller and Unwin (2003). But these authors claimed that to understand the quality of the teaching and learning environments of the Modern Apprenticeship programme, which was the focus of their work, it is important to consider informal and formal learning processes (Fuller & Unwin, 2003), as well as, we would add, the connectedness between the two, as Sappa et al. (2016) argued. The apprenticeship context of Lave and Wenger was quite different from the Modern Apprenticeship programme, which includes the state as a stakeholder, providing part of the funding, as well as the outcomes of formal qualifications (Fuller & Unwin, 2003). These features led Fuller and Unwin (2003) to move forward from the theory of situated learning to propose two approaches that they have named expansive and restrictive.

These authors developed an expansive–restrictive continuum that incorporates features of institutional arrangements, participation, and personal development, which constituted opportunities or barriers to learn in the Modern Apprenticeship programme. The expansive–restrictive continuum, “which extends and elaborates the notion of learning as participation by, for example, highlighting the pedagogical value of incorporating coherently planned on- and off-the-job learning experiences, and developing and reifying a workplace curriculum” (Fuller & Unwin, 2003, p. 410), is useful for our analysis of Apprenticeship Courses (AC) in Portugal.

Fuller and Unwin (2003) argued that expansive approaches are most likely to contribute to “deep learning”, while restrictive approaches contribute only to “surface” learning (Dismore, 2013). The expansive approach of Fuller and Unwin (2003) offers a “reflexive relation” (Fuller & Unwin, 2003, p. 412) with Yrjö Engeström's “expansive learning”. To Engeström (2001), “the object of expansive learning activity is the entire activity system in which the learners are engaged. Expansive learning activity produces culturally new patterns of activity. Expansive learning at work produces new forms of work activity” (p. 139). This implies that knowledge is at the same time learnt and produced by apprentices, who participate in the construction and transformation of knowledge itself. This converges to the form of learning that Lave and Wenger (1991) determined should underpin a community of practice: “learning occurs through centripetal participation in the learning curriculum of the ambient community” (p. 100). Within such systems as the Portuguese ACs where a process-based conception of vocational learning (Orozco, 2018) prevails, competence-based and outcome-oriented pure “expansive learning” is hard to find as apprentices' participation in the production or transformation of work knowledge is very limited.

Fuller and Unwin's (2003) proposal indicated a set of features favourable or unfavourable to promoting learning. The expansive approaches included: access to a range of qualifications, institutional recognition and support, gradual transition to full participation, and career progression post-apprenticeship. The restrictive side included: limited access to learning in terms of tasks, knowledge, or location; no individual support; access to only competence-based qualification; no career prospects; and individual capability being tailored to organisational need. Both assortments of features find parallels within the context of ACs in Portugal.

In our estimate, Fuller and Unwin's expansive–restrictive continuum relates to the school–workplace connectivity framework discussed by Sappa et al. (2016) in which expansive approaches imply a strong connectivity between different learning contexts. In our understanding, such connectivity provides apprentices the opportunity to participate in multiple communities of practice, which is also a feature of expansive approaches according to Fuller and Unwin (2003).

Expansive approaches, from our perspective, also bridge with the concepts of meaningful education and meaningful learning (McGregor & Mills, 2012; McGregor, Mills, te Riele, & Hayes, 2014). McGregor et al. (2014) introduced the concept of meaningful education to refer to “programmes that resonate with the needs and aspirations of young people who find themselves on the outside of mainstream schooling pathways” (p. 611). One of the features of meaningful education programmes is to provide “long-term capital in the form of skills and knowledge that may be exchanged for economic gain.” ACs in Portugal are a programme outside mainstream education and, as we have discussed elsewhere (Macedo, Santos, & Doroftei, 2018), enrolled young people have found the knowledge acquired in ACs more resonating than that in mainstream education. The reasons given mainly related to seeing the applications of theoretical learning to practice and the possibility of translating that knowledge into work experience and, therefore, into economic gain. Apprentices understood this as an advantage over their counterparts in mainstream education.

In the following section, we present a general description of Portuguese ACs since they have features quite different from the common apprenticeships known elsewhere in the world.

Apprenticeship courses in Portugal

Alves (2007) indicated that “the increase in unemployment, in particular youth unemployment, brings to the political agenda a discussion about its role in tackling this phenomenon and is behind the start of the professionalization

of education systems” (p. 60). In Portugal, after the April Revolution in 1976 that implemented a democratic political regime, VET was abolished because it was associated with social and cultural discrimination since it was targeted at poor people (Azevedo, 2015). This was a feature that the political ideology at the time could not easily acknowledge. The early 1980s was a period of educational reform (Azevedo, 2015), culminating in the publication of the Law on the Education System in 1986 (AR, 1986). A new initial VET (IVET) modality was implemented in 1984, the core characteristic of which is alternation between on- and off-the-job training. In the preamble to the decree-law that created this modality, we can detect, as Alves (2007) suggested, a preoccupation with tackling youth unemployment:

The existence of thousands of young people who annually leave the official education system, with or without compulsory schooling, but almost always without any professional preparation, is a relevant cause of the high rates of youth unemployment that exist today. (METSS, 1984, p. 1069)

This dual IVET modality, at first known as the apprenticeship system, is currently referred to as ACs. Integrated around what is termed at the European level “apprenticeship-type schemes” (European Commission & IKEI, 2012) or “apprenticeship in the wider sense” (Cedefop, 2016), these courses are those forms of IVET “that formally combine and alternate company-based training ... with school-based education ... and whose successful completion leads to well and nationally recognised initial VET certification degrees” (European Commission & IKEI, 2012, p. 22).

This training modality is coordinated by the Portuguese Institute for Employment and Vocational Training (IEFP) and therefore governed by the Ministry of Labour.¹ ACs are an IVET modality inserted into the labour market, not the educational system (MQE, 1996). The Portuguese system of ACs comprises training centres with direct management (CDMs), training centres with participatory management (CPMs), external training entities (ETEs), and alternance support entities (ASEs).² The curricula are based on pedagogical standards framed in the National Qualifications Catalogue,

¹ The full name is the Ministry of Labour, Solidarity and Social Security.

² CDMs are training centres administered and directed by the IEFP that have public governance; CPMs are training centres administered by the IEFP and labour market associations that are privately directed with public and private governance; ETEs are private training centres that agree to protocols with the IEFP to develop ACs; ASEs are enterprises, institutions, or other labour market organisations that provide work-context training.

which is regulated by the National Agency for Qualifications and Vocational Education. The ACs are composed of four training components: sociocultural, scientific, technologic, and practical (work-context training). The classroom component (off-the-job training) is 60% of the AC and the practical component (on-the-job training) is 40%. The courses last three periods corresponding to about two and a half years. Each period may be understood as equivalent to an upper-secondary school year, with the 1st period corresponding to the 10th year, the 2nd period to the 11th year, and the 3rd to the 12th year.

ACs are targeted at young people between 14 and 25 years old (IEFP_DFP, 2016). Graduates receive level 4 certification for the National Qualifications Framework/European Qualifications Framework³ and an upper secondary certificate equivalent to the 12th grade (compulsory education in Portugal). Apprentices receive an allowance of about 43€; a meal subsidy paid in cash or in meals, according to each training centre's internal policy; a transport subsidy for those who need it; study materials support according to the Social Security echelon; and a care allowance for those with children or elderly people under their charge. A training contract is made between the training centre and the apprentice that ceases at the end of the course. A protocol is agreed to by the training centre and the ASE providing the work-context training (WCT). The model of this training modality was imported from the German dual education system. The introductory decree-law (METSS, 1984) formulated the apprenticeship system as very similar to that model, but subsequent practice has moved away from it. Several differences exist between the German system and the Portuguese ACs (Doroftei, Silva, & Araújo, 2015). One substantial difference is the way apprentices are recruited in the two countries. In Germany, a candidate applies for an apprenticeship directly at a company that publicizes apprenticeship opportunities (Walden & Troltsch, 2011). In Portugal, the apprenticeship system works in the opposite way to Germany as well as other apprenticeship systems around the world (Cedefop, 2016). Apprentices apply to a training centre that searches for a company available to receive apprentices, even if it has no work place (job) available at the moment or even in the future. Some companies take on young people from diverse IVET modalities as trainees.⁴ Other differences may be found

³ NQF – National Qualifications Framework; EQF – European Qualifications Framework

⁴ Portugal has four training modalities for double certification for young people: ACs, professional courses, education and training courses, and specialized artistic education. Some of these modalities share a target audience and vocational qualifications. All include periods of traineeship in a work context, but only ACs are considered dual VET because of their alternating characteristic.

between Portuguese ACs and the German model. Indeed, the main common point is alternation between on- and off-the-job training (Doroftei et al., 2015). In contrast to Germany, Portugal lacks an intrinsic culture of work-based learning, mainly due to the characteristics of the business world (Azevedo, 2015), despite the several IVET modalities directed at young people, all of which include some type of work-context experience.

A key difference consists of the status of apprenticeships in the two countries. While apprenticeships in Germany have high status (Chadderton & Wischmann, 2014), ACs in Portugal have low status, as does IVET in general. IVET in Portugal has a negative social image (Azevedo, 2015; Guerreiro & Abrantes, 2004; Torres & Araújo, 2010). There is a rooted academic/vocational divide that is common to other countries (Hyland, 2017). This schism interferes with the educational choices of young people (Lehmann et al., 2014).

The research project to which this paper is related aims to understand the role of ACs in promoting social justice for young people in Portugal, mainly by analysing questions of equality and recognition. Our main concern is the social image in Portugal of ACs in particular and IVET in general. There is an overall idea that IVET is directed at less able learners and disadvantaged groups, which contributes to its negative social image and stigma. The analysis conducted for this paper aims to grasp if on-the-job learning might constitute an advantage to ACs that may contribute to improving the social image of IVET. We want to understand it from the standpoints of young apprentices, focusing on their experiences with on-the-job training. The features found empirically were categorized as expansive or restrictive following the work of Fuller and Unwin (2003).

Methods

The research project uses a mixed methods research design, namely a convergent parallel design in which qualitative and quantitative data are collected at the same time (Creswell, 2003; Creswell & Plano Clark, 2007). The objective of using a mixed methods approach was to comprehend the situation of ACs in Portugal and answer our research questions with a larger sample that could only be reached by quantitative inquiry, while at the same time deepening the study through qualitative interviews. As Creswell (2012) indicated, “in-depth observation of a few people offers strength to quantitative data that does not adequately provide detailed information about the context in which individuals provide information” (p. 540). Mixed methods also helps to avoid bias from the location, as qualitative data was collected from a limited region, while the quantitative component broadened data collection

to the entire country. The choice of a convergent parallel design relates to the equal value attributed to quantitative and qualitative data and the intention of converging the results to better understand the research problem (Creswell, 2012). A limit that can be attributed to this design is that empirical data cannot inform the construction of instruments for sequential data collection, making it difficult to investigate emergent issues arising from the analysis of each type of data.

Participants

The participants were associated with the training centres that had been invited to participate in the research. An online search to identify training centres offering ACs resulted in a set of 98 training centres in continental Portugal. These centres were invited to participate in the study through an e-mail sent to the management board or director. Centres near Porto, Northern Portugal, were invited to participate in both qualitative and quantitative data collection, and the remaining centres were invited to participate in only quantitative data collection. The first nine centres near Porto that offered ACs at the time and accepted participation were selected. These were 3 ETEs, 5 CPMs, and 1 CDM.

The data presented and discussed in this paper originated from an analysis of semi-structured interviews with young apprentices and items from the survey. The training centres were responsible for the selection of participants included in the qualitative data collection, taking into consideration criteria indicated by the researchers. The survey was given to all young apprentices at the training centres involved.

Table 1 presents some characteristics of the young participants in the interviews and the survey.

Table 1
Characteristics of young participants

	Age			Gender		AC period		
	Min	Max	Mean	F	M	1st	2nd	3rd
Interviews	17	26	21.1	21 (38.9%)	33 (61.1%)	1 (1.9%)	24 (44.4%)	29 (53.7%)
Survey	14	27	18.4	238 (35.8%)	427 (64.2%)	254 (38.2%)	257 (38.7%)	154 (23.2%)

The young interviewees were attending 22 different ACs corresponding to 16 education and training areas (Table 2).

Table 2

Distribution of apprentices by education and training area

Education and training area	N
Hospitality & catering [HC]	8
Textile, clothing, footwear and leather industries [TCFLI]	6
Materials (wood, cork, paper, plastic, glass and other industries) [MI]	5
Electricity and energy [EE]	5
Audio-visual and media production [AVMP]	5
Social work and guidance [SWG]	4
Metallurgy and metal industry [MMI]	4
Trade [T]	3
Craft [C]	3
Secretariat and administrative work [SAW]	2
Beauty care [BC]	2
Construction and repair of motor vehicles [CRMV]	2
Protection of people and goods [PPG]	2
Health [H]	1
Electronics and automation [EA]	1
Computer science [CS]	1
Total	54

Quantitative survey

For the quantitative data collection, an online questionnaire was sent to young apprentices from all over the country. The boards of the 98 training centres were requested to pass a link to the questionnaire to the apprentices enrolled in the ACs at the time. As no information about the training centres was collected, we do not have data about how many training centres participated in the quantitative phase. The survey resulted in 665 valid answers. The instrument had 57 questions divided into 4 sections: demographic data (17 questions), school experience (13 questions), experience with the AC (20 questions), and expectations for the future (7 questions).

A Likert scale with four items with five possible responses was used to appraise the WCT component. The scale comprised the following items: "In the work context, I'm being prepared to exert the occupation I'm training for," "I feel I am valued in the work context," "The work-context tutor helps me whenever I need," and "I feel I'm mistreated in the work context" (reverse score). Reliability analysis conducted using a measure of internal consistency revealed a Cronbach's

alpha of .69, which is an acceptable value for the social sciences (Field, 2009).⁵ The data were analysed with IBM SPSS Statistics 23. The population of young people in ACs in Portugal in 2016 was 25,750 (IEFP_DPGC, 2017), with 16,488 (64%) males and 9,262 (36%) females in the age groups <20 = 11,004 (42.7%), 20–24 = 12,863 (50.0%), and >25 = 1,883 (7.3%). Although the proportions of males and females in the sample were similar to those in the population, the same was not true for the age groups, as the participants were distributed as follows: <20 = 479 (72.0%), 20–24 = 175 (26.3%), and >25 = 11 (1.7%). Still, the sample was not intended to be representative of the population as there was no procedure to select it.⁶

Qualitative interviews

For the qualitative part of the data collection, semi-structured interviews were conducted with 54 young apprentices. There were questions about their WCT, namely about how the interviewees perceived their experiences in the WCT and whether they thought that they were learning in the WCT. The qualitative data was analysed using content analysis with NVivo 11. Selected categories under analysis in this paper refer to perceptions about the WCT component and work experience. These were subsequently categorized into expansive or restrictive learning.

Quantitative and qualitative data collection took place from September 2016 to March 2017.

Neither the qualitative nor quantitative results can be seen as representative or generalized to the population of apprentices in Portugal since the quantitative sample is not representative of the population as there was no sampling process applied and the qualitative data are context specific and limited in the number of participants.

⁵ Cronbach's alpha is sensitive to the number of items in a scale: the more items, the higher the α (Field, 2009). So for a small number of items, four in this case, we can consider $\alpha = .69$ to be very good.

⁶ Nevertheless, the central limit theorem means we may expect that, with a sample as large as we have, "the sampling distribution has a normal distribution with a mean equal to the population mean" (Field, 2009, p. 42).

Learning in the work context: perspectives from young apprentices

As mentioned above, ACs have 40% on-the-job training, which represents 1,500 hours of WCT. Thus, this training component takes on central importance in the overall learning of young apprentices. To assess young apprentices' experiences with WCT, we employed both the survey and the interviews.

Table 3
Assessment of WCT (survey results)

N	Valid	620
	Missing	45
Mean		3.86
Median		4.00
Std. deviation		0.872
Range		4
Minimum		1
Maximum		5

The calculated assessments of WCT (Table 3) tended to a positive image of the WCT component of ACs (mean of 3.86, SD of 0.872). Given these results, we may say that WCT tended to be embedded more in the expansive than the restrictive side of the expansive–restrictive continuum (Fuller & Unwin, 2003).

With the interviews, we explored qualitatively the apprentices' perspectives of WCT. Many of them described positive outlooks about the work context, showing that people in companies had very positive opinions of the courses and apprentices. They also reported that they were learning about issues they did not learn in regular classes, corresponding to the expansive results from the questionnaire. This is especially relevant as apprentices seemed to extremely value work learning. Nevertheless, there were substantial references to people in WCT “exploiting” them or “treating them like slaves” and only wanting them there because they represented “free work,” which makes it more like restrictive approaches. We are going to explore both outlooks. Table 4 presents the main ideas regarding WCT that emerged from the interviews.

Table 4

References of young apprentices to WCT on an expansive–restrictive continuum

Expansive	Restrictive
Acquiring general knowledge	Always doing the same tasks
Acquiring work habits	“Bring me that”
Attitude (behaviour) changes	Bad environment
Development along with the company	Blackmail
Entrepreneurship	Companies living off of trainees (apprentices)
Establishment and fulfilment of personal goals	
Experience in the field	Doing unrelated tasks
Feeling active	Exploitation – being treated as a slave
Good environment	
Growth	Job offer while in the course
Improving self-concept	No job prospects at the company
Intergenerational coexistence	Not having anything to do/not doing anything
Interpersonal relationships	Not learning anything
Interrelation between classroom learning and WCT	Not leaving on time/Having no exact time to leave the company
Job opportunities	Only observing, no experimenting
Knowing the real world	Permanent execution of “minor” tasks
Learning through experience	Using apprentices as employees
Learning life experiences	Verbal violence
Learning subjects not approached in the classroom	Simultaneous work in the company where doing WCT (role confusion)
Learning the field	WCT experience does not prepare them to enter the labour market
Less scientific knowledge	
Maturity	
New learning	
Putting theoretical learning into practice	
Responsibility	
Vocational guidance	
Total expansive references: 84	Total restrictive references: 71

Expansive features

Apprenticeship courses privilege the insertion of young people into the labour market (MTSS, 2007). The core characteristic of alternation is intended to provide apprentices with skills and knowledge related to the occupation they are being trained for directly in a workplace. On the expansive side of the continuum, apprentices reported items favourable to learning, including learning by experimenting, being integrated, and being allowed to perform the tasks of the occupation.

In WCT, young apprentices may have access to and benefit from new forms of working, technologies, or equipment that the training centres do not have. One participant stated that during his WCT he experienced the

central task⁷ of its activity and he felt privileged among his colleagues. He mentioned that he could benefit from the way the central task in the company was presented to him, which was different from the way he would learn it in the classroom. “In⁸ my case, I feel that I was among the privileged ones who actually only did, only had contact with work in their area, so I just did [the central task of the occupation] in my course (...), especially in the ... in the digital [central task of the occupation]. Because I hear more and more that we will not have contact with it here in the classes, despite it being on the syllabus, ... I took advantage of it.” (Male, 2, 2nd period, TCFLI⁹) A female apprentice reported that she felt better able to learn in the work context because she couldn’t learn so well in the classroom.

Me... if they explain something to me in the WCT, do something in front of me, I learn quickly... Here no; here I don't learn; I prefer being in the workplace, where I learn faster than here.
(Female, 24, 2nd period, SWG)

WCT was revealed to be important in promoting personal and vocational development given that the young apprentices referred to growing up, changing their attitudes, and feeling more mature during the training. They stated that in WCT they learnt not only the tasks of their occupation but also how to behave in a workplace and about life experiences from company employees. They were compelled to establish interpersonal relationships with older people, whether employees or clients, which they noted as positive. Moreover, WCT helped to confirm or invalidate their interest in the occupation.

It was a shakenp! Completely! It changed my way of seeing, even here at school. And now I have my objectives and I struggle to really stick to them. Because when I was at [upper] secondary school, it was, “If I can do it, I will; if I don't get a 15, I'll get a 13.”¹⁰ Not now. Now it's completely different, even here. Now I really want to learn and it is really this that I want. Also because I think that when I got to my first secondary, regular school, I was too young to decide what I wanted;

⁷ A central task is a task that is dominant and principal for the occupation, for example sewing or modeling in the textile industry. In a Dress Modeler course, the central task is modeling. In a Seamstress course, the central task is sewing. A related task is a task that is secondary to the central task. In the same example of the textile industry, undoing hems would be a related task. If a young apprentice only undoes hems during the WCT, he/she is not experiencing or learning the central task of the occupation in the WCT.

⁸ The interviews were anonymized, so there are excerpts containing references in square brackets to contents removed to preserve the participants’ anonymity. All quotes were translated into English by the authors.

⁹ The initials refer to the education and training area that the participant was in according to Table 2.

¹⁰ In Portuguese upper secondary education (from 10th to 12th grade), grades go from 0 to 20, with the grades from 10 to 20 being positive.

at 14 years old, what do I know if I want to be in pharmaceutical or administrative work? I had no experience; I only had maths, sciences, Portuguese, English. ... I think the contact with work that I had made me realize what I really like and don't like. (Female, 23, 2nd period, SAW)

Apprentices feel valued and respected when the employer recognizes their involvement, capabilities, learning, and work or promises to employ them or recruits them through the Professional Traineeship programme after finishing the course.¹¹

E: When you say that they treat you differently, you mean what, treat you better?

P: Yes, as employees. When they see that a person works, a person tries hard, they teach, they prepare in a different way.

E: Do you think you have prospects for work at the company?

P: I do. She already offered me an employment contract, a professional traineeship at the end of the course. (Female, 24, 3rd period, AVMP)

As Sappa et al. (2016) noted, the connectivity between learning contexts is a learning facilitator for apprentices. Therefore, this connectivity may be seen as an expansive feature for those who experience it and find sense in it. One young man put it eloquently by referring to the application of classroom subjects to his WCT:

When we get to our workplace, every question that is posed to us there ... is practically what we learn here. Like Portuguese, we learn certain things about Portugal and when foreigners ask us we always know how to answer. And English also helps us to answer them, both English and French, and other areas, too. Health and safety at work helps us to be better at work and protect ourselves and the clients. Civics also helps us to understand more about Portugal and beyond. And the practical classes help us to interact with everything. (Male, 20, 3rd period, HC)

Expansive features in WCT contribute to young people making sense of what they are learning and transforming it into “meaningful learning” (McGregor et al., 2014) which is rooted in their skills and knowledge and thus becomes transferable to other workplaces.

Restrictive features

On the reverse side of the expansive approaches, we find the restrictive ones. In contrast to learning by experimenting, being integrated, or performing the tasks of their occupation, many young people stated that they could only observe employees carrying out the tasks. They felt they were just, as some of them put it, there to “bring me that” as someone who gets tools for employees

¹¹ The Professional Traineeship Programme is a measure of employment governed by IEFP that aims to insert young people into the labour market or professionally reconvert people that are unemployed. It lasts for 9 months and is not renewable. In Portugal, the words profession and professional are used to refer to occupations or professions.

or just performs tasks unrelated to the activity. Actually, the latter would constitute a violation of the training contract that states that companies must not require apprentices to complete tasks that are not part of the subject of the course (IEFP_DFP, 2016). Unfortunately, this happened with several apprentices who spent all of the time during their WCT performing “minor” tasks (e.g. cleaning the floor, washing dishes, undoing hems). Observations may be useful when apprentices are at the beginning of their course, but when they are in the 3rd and last period and have not had the opportunity to experiment, to learn by doing, they have strong limitations to their acquisition of vocational skills. They are supposed to become autonomous professionals by the end of their AC, but such situations as just observing or only performing other tasks limit their professional autonomy and development. One young apprentice mentioned that this way of treating trainees is common in the country and culturally rooted.

The fact that you are a trainee puts you in a compromised position, right? It's ... because we notice "Oh! He's a trainee, he has to do everything!" And we think it's good to do everything ... at an early stage to understand even the dynamics of an entire company, right? Sweeping the floor, drawing, ... everything, isn't it? But ... unfortunately this is not what happens. There were 11 of us, and I think 3 or 4 were regular trainees. The rest were ... serving as multifunctional tools ... always! And even people who have not done [central task of the occupation], so I think that's more serious, because they take advantage of the fact that we're there. ... They still have the nerve to say, "You're here for free and you're ruining or delaying the production." And then, well, ... you can use this trainee to teach anything, and to hire him later, because it will be good. And they think of everything but this, and I think this is a flaw, but I think this is cultural, almost. (Male, 22, 2nd period, TCFLI)

Some companies seemed to be more concerned with the benefit that young apprentices may bring to the company than with training them, revealing a profit culture (Lehmann et al., 2014) indifferent to social responsibility. Offering a job while apprentices are still in training, suggesting that they transfer to evening classes, reveals an unawareness of the functioning of AC and also discloses a lack of concern with training in general and the training of the companies' employees in particular. Although a job offer may signify to the apprentice that he/she has acquired the knowledge and skills necessary for the occupation, it increases the risk of young people dropping out of the AC as job availability is an important factor in early departures from education and training (De Witte, Cabus, Thyssen, Groot, & van den Brink, 2013; Doll, Eslami, & Walters, 2013; Santos, Macedo, & Araújo, 2018; Tomaszewska-Pekala, Marchlik, & Wrona, 2017). This training modality has a high proportion of dropouts. The December 2016 report of the governing institution, the IEFP, revealed that 32.1% of apprentices drop out of training (IEFP_DPGC, 2017) during that year, many to enter the labour market. Fortunately, there are apprentices that resist such calls.

They already asked me to see if I could go and change to evening classes. Because there it is like this ... there were times that they didn't need people, but a time came when they needed people to go there and work, and in that case, they called me... But I couldn't go. I couldn't leave the course in the middle, almost the end. (Male, 20, 3rd period, EE)

On the other hand, some apprentices complained about the lack of job prospects at their workplace. They knew in advance that companies had no opportunity or interest in hiring new employees and this may also have constituted a weakening of their learning motivation.

In the workplace where I am it is complicated because when we went there they said they weren't accepting anybody, and that they would not fire anyone soon to ... hire new people. (Male, 24, 3rd period, EE)

Normally, we never stay. Because we leave and other trainees get in right away, so... (Male, 19, 3rd period, TCFLI)

Some stated that companies only work with trainees because they represent cheap labour and as a consequence they felt exploited by employers.

I didn't want to say that some take advantage of the WCT to get free labour, but that's more or less how it works. (Male, 25, 2nd period, AVMP)

The WCT component has “pedagogical standards”, or a syllabus, for each course area. The pedagogical standards define what apprentices must learn in their WCT. Companies have access to these standards as apprentices take an apprentice booklet to their workplace. As reported elsewhere (Doroftei, 2017), however, WCT tutors do not follow those standards, putting the overall learning that apprentices should attain at risk. For this reason, some apprentices referred to a mismatch between what they learnt in the classroom and what they encountered in the workplace. They report that their WCT was not preparing them to enter the labour market because, as noted before, they did not have the possibility to develop their knowledge and skills in the workplace.

What we did before in class is not so related ... taking one or two subjects, one maybe, but overall it did not have so much to do with what I did there. (Female, 20, 2nd period, PPG)

In contrast to expansive connectedness between learning contexts (Sappa et al., 2016), there is a lack of connectivity on the restrictive side of the continuum. Restrictive features are elements of obstruction and stagnation that weaken the acquisition of “meaningful learning” (McGregor et al., 2014) and limit the transferability of learning to other situations.

The expansive–restrictive continuum in the Portuguese context

The Portuguese ACs, as mentioned above, have features quite different to common apprenticeships, including the UK’s Modern Apprenticeships. Therefore, the expansive–restrictive features listed by Fuller and Unwin (2003) do not fit into the Portuguese context unmodified. Grounding ourselves in our empirical data, but sticking theoretically to Fuller and Unwin (2003), we propose the following expansive–restrictive features of WCT in Portuguese ACs (Table 5). The listed features group those given in Table 4.

Table 5
Adaptation of the expansive–restrictive continuum of Fuller and Unwin (2003) to Portuguese ACs

Expansive	←————→	Restrictive
Learning by experimenting Integration in tasks Performing tasks of the occupation Promoting personal and vocational development Good work environment Job opportunities post-AC Respect Connectivity between learning in the workplace and in the classroom		Learning by observation only Being the “ <i>bring me that</i> ” Performing “ <i>minor</i> ” tasks (e.g. cleaning) Stagnation and exploitation Bad work environment No prospects for job opportunities post-AC Mistreatment No relation between learning in different contexts

We agree with Fuller and Unwin (2003) when they stated that “apprenticeship learning is likely to have different meanings in different organisational contexts” (p. 413). As we determined in our empirical data, the apprentices reported experiences of expansive and restrictive features in their WCT. Therefore, they met with organisational contexts that fit more in the expansive side of the continuum and others in the restrictive side.

Despite the fact that ACs have already been in Portugal for a long time, the situation is not comparable to the tradition of apprenticeships in the UK. In that sense, the features of Fuller and Unwin’s (2003) expansive–restrictive continuum that refer to the “participative memory” of apprenticeships are not applicable to ACs. For this reason, there is no culture of participation of work-based learning on the Portuguese labour market, which has implications for the “status as trainers” of companies, and especially WCT tutors. Often, they do not understand themselves as trainers and they do not have specific training, especially pedagogical, for training others.

Features that refer to the apprentices' "status as learner" – which for the UK context relates to apprentices being considered as learners and not employees and so having the possibility to attend off-the-job training – find some parallel in Portuguese ACs, but in somewhat the opposite way. As mentioned above, Portuguese apprentices first enrol at a training centre and are later placed at a company. In our understanding, this has two implications. The first is that this situation takes some responsibility from the companies' shoulders, which is conducive to behaviours that send the message of doing a favour to the apprentices by accepting them into the WCT. The second concerns the fact that apprentices are only considered to be learners and, in some cases, are not given the chance to experience the tasks of the occupation. This latter situation can also be explained by the companies' apprehension of jeopardizing the work and production flow or even leading to damages. Therefore, the status of Portuguese apprentices is not similar to employees, as may occur in apprenticeships in other countries. From our data, we understand that apprentices may become full participants in an occupation when the course ends, but not while in an AC. They may not find a place in a community of practice if they do not get employment in that specific occupation. Portuguese apprentices may have learnt all they need to carry out their occupation and have created an occupation-related identity while in the AC, but they may not have the opportunity to enter the labour market in that occupation. This is more problematic as many apprentices do not have job opportunities at the company where they had WCT, and some also do not in the area of their occupation.¹² Nonetheless, there is work-related learning that applies across different activities, such as group work and meeting schedules, which, as our analysis shows, were valued by apprentices and may be applied to all work experiences.

Expansive learning contexts, for Fuller and Unwin (2003), imply "access to learning fostered by cross-company experiences built in to programme," while in the opposite contexts access to learning is "restricted in terms of tasks/knowledge/location" (p. 411). Given our empirical data, we may consider that ACs show an overall process-based conception of learning (Orozco, 2018), a sense in which learning is, in general, restricted in terms of tasks, knowledge, and location. Given this, our adaptation of the continuum refers to whether or not the possibility to perform the tasks of the occupation is present and does not consider a broad approach to learning.

¹² This is a situation that differs among education and training areas. Some have employment rates of around 90% and others of about 40%.

The feature related to “post-apprenticeship vision” (Fuller & Unwin, 2003, p. 411) that refers to “progression for career” on the expansive side of the continuum and “static for job” on the opposite must be elaborated differently in Portugal. When UK’s apprentices obtain an apprenticeship at a company, they have confidence that they will become employees. In ACs, as the connection with the company is very weak—apprentices often change companies during the AC—the issue relates to having the expectation of being hired by the company post-apprenticeship.

Our empirical data reveals some features that may significantly influence the quality of learning in WCT. These features do not have parallels in Fuller and Unwin’s (2003) work and were added to our adaptation of the expansive–restrictive continuum. We believe that the type of work environment (good or bad) and the way that apprentices are treated during WCT are important in the sense that they influence motivation and the capability to learn. Moreover, the connectedness between knowledge acquired in the workplace and knowledge acquired in the classroom (Sappa et al., 2016) is important. Our empirical data and previous work (Macedo et al., 2018) supports the conclusion that apprentices are more motivated to learn if they find correspondence between theoretical and practical knowledge.

Final remarks

In this paper we tried to address young apprentices’ statements about WCT sustained by the theoretical framework of the expansive–restrictive continuum of Fuller and Unwin (2003). We also tried to intertwine them with the concepts of meaningful education and meaningful learning of McGregor et al. (2012, 2014) and school—work connectivity (Sappa et al., 2016).

Despite bad experiences for some, apprentices’ views of WCT are positive as they value the work knowledge they may obtain, whether it is skills and knowledge related to the activity or such soft skills as teamwork, punctuality, assiduity, and responsibility. They also noted as an advantage having work experience they can put on their *curricula vitae*.

Expansive features such as learning by experimenting, integration, performing tasks related to the occupation, having a good work environment, respect, and prospects for getting a job after completing the course were very valued as elements that favour “deep learning” (Fuller & Unwin, 2003). In contrast, restrictive features such as only observing, performing unrelated tasks, having a bad work environment, mistreatment, and having no prospect to remain working in the company after the AC contributed to only “surface learning” (Dismore, 2013) and stagnation may have taken place. As Lave and Wenger (1991) stated, “learning is an integral and inseparable aspect of

social practice” (p. 31). As such, apprentices learn from not only expansive features but also restrictive ones. Yet, with the latter they do not learn beneficial practices but learn to be defensive or disengaged in a work context. Expansive and restrictive approaches to learning in WCT could be further explored with former apprentices to deepen the study and reveal its consequences post-AC.

Connectivity between learning in the two contexts, classroom and workplace, plays a very important role as apprentices can make sense of the knowledge they are acquiring, as Sappa et al. (2016) have noted. Our data from interviews with directors and tutors tell us that this connectivity, when it happened, was more random than it was an object of reflection (Doroftei, 2017). We may say that the most common approach was a “detached view of vocational learning and teaching across the various learning sites” (Sappa et al., 2016, p. 290) ratified by companies’ lack of interest in following the WCT syllabus. However, some apprentices identified in their WCT the application of knowledge acquired in the classroom. Therefore, we conclude that implementation of continuous pedagogical training for WCT tutors would be beneficial for improving the expansive learning potential of the work context and at the same time raising their awareness of the importance of applying the WCT syllabus. National policies on ACs should foresee this requirement.

As a cultural change in employers’ views regarding work-based training in Portugal is still underway, the viewpoints of the apprentices may reflect the adaptation that the labour market is still experiencing. The culture of profit seems to overlap with the social responsibility of providing training to young people. In addition, as employment is scarce and many employers cannot employ apprentices after they finish their courses, there may be some belief in the usefulness of work-based training. As Lehmann et al. (2014, p. 587) stated, “what is needed is a more profound cultural shift in employers’ responsibility in the development of expansive training environments” in Portugal. This implies also work on the valuation of IVET in general and AC in particular. The results of the study support both the perspective that there is still a lot to put in place in order to change the social image of ACs and IVET in Portugal through WCT and also the idea that several ongoing changes are promising.

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