

# The Syllabi of Portuguese Apprenticeship Courses and Opportunities to Access Higher Education: Critical Perspectives of IVET Students

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## Abstract

In Portugal, Initial Vocational Education and Training (IVET) has a negative public image, which is partly due to perceptions about course syllabi and the low number of former IVET students who go on to higher education. We aimed to analyse the perspectives of IVET students on the syllabi of a Portuguese IVET modality, specifically the apprenticeship courses. Our focus was on the knowledge conveyed in the sociocultural and scientific components, as well as the possibility of accessing higher education. The analysis was made within the framework of Michael Young's "powerful knowledge" and McGregor's "meaningful education" concepts. Data analysis was based on 54 semi-structured interviews with apprenticeship course students from nine training centres in northern Portugal. A deductive-inductive content analysis supported by NVivo software was used. The knowledge acquired in the apprenticeship courses is compared with its counterpart of general upper secondary education. The results point out that overall, the participants mention that they find the subjects of the sociocultural and scientific components of the apprenticeship courses' syllabi to be easy, simplified, and summarised. These features discourage some students who expect to extend their knowledge. For others, the applicability of the knowledge acquired to "real life" is valued. As far as access to higher education is concerned, some students are aware that the knowledge acquired in the courses hampers their ability to take the national access exams, while others are not aware of these constraints. Paying for private lessons to study for the exams is a mentioned possibility. In conclusion, apprenticeship courses' sociocultural and scientific syllabi are based on a very low academic level, comparable to that of lower secondary education. This levelling down impairs students to perform well in the national exams that give access to higher education. A real equivalence of knowledge between the sociocultural and scientific components of apprenticeship courses and the general component of general education would be beneficial for that. It could also promote greater parity of esteem between vocational and general education, lessening the negative perception of IVET that persists in Portugal.

## 1. Introduction

The paper focuses on the apprenticeship courses (AC), which are programmes created in Portugal in 1984, following the model of the German Dual System. Although the initial regulation was based on the German model (METSS, 1984), the implementation of AC did not exactly follow it and became a school-based training modality (Doroftei et al., 2015). AC are inserted in the Portuguese Initial Vocational Education and Training (IVET) system. AC are aimed at young people aged between 18 and 25 years old, although they can also be attended by young people over the age of 14 with special permission from the Ministry of Education. However, the governance of the AC is dependent on the Ministry of Labour through the IEFPP – Institute for Employment and Vocational Training of Portugal. AC are not integrated into the educational system (MQE, 1996). AC give access to an upper secondary education diploma (grade 12) and a level 4 European Qualifications Framework (EQF) vocational certificate. The courses' syllabi are composed of four components: sociocultural (subjects like Living in Portuguese, English, ICT, and personal development), scientific (subjects like mathematics, law, economics, chemistry), technological (subjects specific to the professional field), and practical (work-based training). The structure of AC has a maximum duration of 3700 hours, of which the work-based training represents about 40%. More information on Portuguese AC and the differences from the apprenticeships of Germany and the UK can be found in the authors' work (Doroftei et al., 2015, 2018; Doroftei, 2020)

AC, like IVET in general, are subject to a negative public image, often based on the idea that IVET students are “dumb” and that IVET curricula are easy (Doroftei & Silva, 2024). This paper aims to discuss the perspectives of young people attending AC on the knowledge acquired in the courses, particularly the knowledge conveyed in the sociocultural and scientific components. This option was based on two reasons. Firstly, we were interested in knowing the perceptions of young people attending AC about its syllabi and how they felt about it, as they are the main target of the low reputation of IVET (Doroftei & Silva, 2024; Henriques et al., 2018). Secondly, the low reputation of IVET is also related to its syllabi and to the fact that IVET students have low participation in higher education (HE) (Henriques et al., 2018; Hyland, 2017).

The sociocultural and scientific components of the syllabi (corresponding to the general component of general education) are mainly theoretical. The sociocultural component aims for “the acquisition/reinforcement of personal, social and cultural knowledge and skills, namely in the fields of communication in Portuguese and foreign language, citizenship and employability, autonomous and teamwork, innovation and entrepreneurship and use of new technologies” (IEFP\_DFP, 2018, p. 14). The scientific component aims for the “acquisition of scientific knowledge and structuring skills, developed through observation, analysis and experimentation, contributing to a more conscious and grounded professional exercise” (ibidem). Knowledge of the subjects composing the sociocultural and the scientific components is necessary to pass the national exams, Portugal's most common and universal form of admission to HE. A bachelor's degree can facilitate social mobility (Haveman & Smeeding, 2006; Henriques et al., 2018). Therefore, it is crucial to consider the opportunity to access higher education for IVET students, who tend to come from families with low socioeconomic status (Alves et al., 2001; Doroftei, 2020; Neves et al., 1993). Furthermore, the government of Portugal is committed to ensuring that a minimum of 50% of upper-secondary students partake in IVET and that 60% of individuals aged 20 are engaged in HE (RP, 2019). Therefore, facilitating IVET students' pursuit of higher education would enhance the attractiveness of IVET and align with the government's objectives.

This study aims to add to the knowledge about IVET syllabi, particularly by providing insight into the opinions of IVET students regarding the sociocultural and scientific aspects of AC syllabi. Furthermore, it discusses the influence of the perceptions of the curriculum on the public image of IVET.

The paper is organised as follows. Firstly, we report on our theoretical framework based on McGregor's “meaningful education” and Michael Young's “powerful knowledge” concepts. Secondly, we refer to the methods and the participants. Thirdly, we present and discuss the research results, and finally, we refer to the conclusions and limitations of the study.

### Nomenclature

AC	Apprenticeship Courses
IVET	Initial Vocational Education and Training
VET	Vocational Education and Training
HE	Higher Education

## 2. Theoretical Framework

### 2.1 Vocational Education as “Meaningful Education”

In previous research (Macedo et al., 2018), it has been argued that alternative contexts to general education can offer a “meaningful education” for young people who have become disengaged from school (McGregor et al.,

2015). Within alternative educational contexts, young learners may rediscover enthusiasm for learning and develop a new relationship with knowledge (Charlot, 2009). Learning can be perceived as a means of acquiring skills and knowledge and even influencing one's self-esteem.

McGregor and colleagues (2015) propose the concept of "meaningful education", which is derived from programmes closely linked to young individuals' reality. These programmes engage learners in pedagogical experiences that connect theory with practical situations. This establishes connectivity between theory and practice, as emphasized by Sappa and colleagues (2016) and it may also enable "meaningful learning" as McGregor et al. (2015) noted. This connectivity is often absent in general education, which leans heavily towards theoretical approaches. Vocational Education and Training settings offer alternative contexts to general education (Doroftei, 2020; Macedo et al., 2018; Nada et al., 2018) and thus fall within the definition of "meaningful education", as outlined by McGregor and colleagues (2015).

Te Riele and Crump (2002) identify multiple dimensions that enhance the appeal of vocational education curricula to young people. This includes the knowledge conveyed, as well as the pedagogical strategies employed and the relationships forged between educators and students. The authors state that vocational education programmes have the potential to align students' interests and abilities, foster accountability, boost retention rates, facilitate cooperative learning, and integrate knowledge and skills.

However, pedagogical strategies aimed at promoting "meaningful learning" (McGregor et al., 2015) must not be pursued by curricula that restrict the future prospects of young people, particularly in achieving a bachelor's degree or developing analytical and critical thinking about the world around them.

## 2.2 Curriculum as Stigma and The Role of "Powerful Knowledge"

Regarding the Portuguese AC, the academic level of the sociocultural and scientific subjects taught in the AC syllabi is not on par with the general upper-secondary curricula. Despite providing a certificate of equivalence to grade 12 of schooling, the AC syllabi are lowered to the level of lower-secondary education. This affects the readiness of young individuals who obtain upper secondary education through AC with regard to knowledge acquisition since they are not on par with those who acquire it through general education.

The process of levelling down appears to rest on the assumption that youths who participate in these courses cannot follow a "normal" curriculum (Alves, 2007). This flawed depiction fosters the view of IVET as an inferior educational pathway (Cunha, 2018; Doroftei & Silva, 2024), which affects its public image and perceived value (Cedefop, 2014). It also impacts opportunities for further study in higher education, as the syllabi do not adequately prepare students to do the national exams for accessing HE.

Tarabini and Jacovkis (2019) clearly expose the difference between theoretical and practical knowledge and the perception of ease associated with the latter. The authors acknowledge that theoretical knowledge is often perceived as difficult, linked to a specific concept of culture not suitable for all learners. On the contrary, practical knowledge is regarded as easy, unrelated with the concept of culture, and attainable for all learners (ibidem). The authors also note that the divide between theoretical and practical knowledge has contributed to the negative perception of IVET as an educational pathway (ibidem).

Michael Young and colleagues (2014) argue that young individuals have an "entitlement to knowledge", which enables them to expand their perspectives and cultivate a critical understanding and appreciation of themselves, others, and the world. Such knowledge empowers them to inform, interpret, analyse, and defend their views and also to comprehend and scrutinize their professional practices and their applicability in diverse contexts, whether personal or professional (Sappa et al., 2016). School education has an essential role in providing what Martha Nussbaum (2014) refers to as cosmopolitan knowledge, regardless of the educational pathway. Cosmopolitan knowledge facilitates critical thinking, a perspective of the other, and awareness of alternative ways of thinking about life and the world. This aligns with the proposed key competencies for lifelong learning by the European Commission (2019).

Michael Young et al. (2014) posit that social justice can only be achieved through the acquisition of what they refer to as "powerful knowledge", with knowledge being considered a right for all learners. This "powerful knowledge" is obtained through schooling, which aims to "to enable all students to acquire knowledge that takes them beyond their experience" (Young et al., 2014, p. 10). The authors state that schools have a responsibility to provide this type of knowledge as many students may lack access to it within their families or local communities.

The idea of "powerful knowledge" faced scrutiny (White, 2018, 2019), prompting Michael Young to alter his stance on the types of knowledge that suit the concept (Young, 2016). Previously, the author centred the concept on the knowledge imparted by STEM (Science, Technology, Engineering, and Mathematics), while downplaying the knowledge imparted by vocational education, especially by apprenticeships, because he considered it context-specific and, correspondingly, incapable of promoting abstract reasoning and developing critical thinking (Young, 2010). Subsequently, the author and their colleagues expanded the scope of "powerful knowledge" to include the Humanities. However, they acknowledge its limitation in generalisation. As stated by the author, knowledge is deemed powerful when it can predict, explain and help imagine alternatives (Young et

al., 2014). Notwithstanding the contentious emphasis of “powerful knowledge” within subject-based specialized knowledge, these abilities extend beyond academic utility, applying to all aspects of life. This fosters a heightened awareness of the power mechanisms faced by individuals (Tarabini & Jacovkis, 2019). Central to the concept of powerful knowledge is its capacity to enable individuals to comprehend the world and its application across diverse contexts, as advocated by Sappa et al. (2016).

Tailoring the curriculum to specific groups, based on cultural and social capital and primary habitus assumptions (Bourdieu, 2010; Clavel, 2004) can limit children and young people’s expectations. It fails to encourage them to transcend the limitations suggested by a “non-schooling” culture (Young, 2015), and contributes to the social reproduction that the school is suspected of promoting on behalf of the hegemonic curriculum (Bourdieu & Passeron, n.d.). On the other hand, students who experience a sense of “strangeness” (Silva, 2008, 2010) towards the school syllabi and those who encounter challenges during their academic journey could benefit from curricula that align more closely with their life perspectives, providing them with a greater level of comfort and confidence. This is a challenge eloquently articulated by Coleman (2011) in the context of discussing equality of opportunity, emphasising the difficulties encountered by educational systems in resolving it. It is a challenging predicament to determine which curriculum is suitable for an individual child, considering that approximately 60% of students do not proceed to higher education, and it is uncertain whether the child belongs to the 60% or the 40% who will attend HE (Coleman, 2011). The topic that Coleman brought up is delicate, since it is hard to anticipate whether a specific child will pursue HE. However, young people must be given the autonomy to make their decisions without the influence of structural limitations. In line with Brighouse (2007), young individuals whose choices may be restricted by their family environment require access to alternative models of existence, with the school being the primary space for them to get exposed to supplementary role models (Brighouse, 2007).

Connel (1997) posits that the hegemonic curriculum mirrors the interests of the most advantaged groups and casts doubt on its capacity to foster social justice. However, similarly, modifying the curriculum to suit the circumstances of susceptible social groups within a schooling system that arranges general upper secondary education to pave the way for higher education may exclude young individuals from those groups. Offering a curriculum that is context-oriented may not provide the required knowledge to access higher education levels. It can create a barrier between those who have access and those who do not, impeding upward social mobility (Haveman & Smeeding, 2006; Henriques et al., 2018). Some students in vocational education believe that they lack the skills necessary to attend higher education (cf. Doroftei, 2020). This indicates that they have internalized the “legitimacy of their exclusion” (Clavel, 2004, p. 114), perceiving themselves as unable to fit into the schooling system and intellectually and culturally inferior. Studies on IVET indicate that the attendees are predominantly young individuals with poor academic backgrounds and from families with low academic qualifications (Almeida, 2005; Henriques et al., 2018; Neves & Figueiredo, 2007; Taylor, 2008; Taylor et al., 2013). This might create a public perception that IVET students are unable to cope with the upper secondary curriculum, justifying a lowering of IVET curricula to previously completed school years. Still, attaining a bachelor’s degree enhances the prospects of upward social mobility for young people from low-income families (Haveman & Smeeding, 2006), a crucial concern in the Portuguese context.

### 2.3 IVET and Access to HE: The Portuguese Context

Portuguese media typically states that IVET targets youths who face challenges in keeping up with general education (cf. C.A.C., 2018; Viana, 2018). Consequently, social representations emanating from such statements indicate that IVET is inherently easier compared to general education (Doroftei & Silva, 2024; Cunha, 2018). This notion is backed up by public information showing low participation rates of IVET graduates in higher education (cf. Francisco, 2018; Lusa, 2019; SOL, 2019).

The primary mode of entry to higher education in Portugal is via the National Access Contest, which is available to individuals who have completed their upper-secondary education (grade 12). The application process is based on access exams that are taken nationwide, ensuring standardized examination content throughout the country. These national access exams encompass the curriculum content of general education. There are additional pathways for obtaining admission to higher education, each with particular limitations. One example is the “Access Contest for those older than 23 years of age”, which mandates a minimum age of 23 to apply.

In 2020, the Portuguese government established the Special Access Contest to higher education (SACIVET) for graduates of IVET and specialised artistic courses (cf. PCM, 2020). This measure, which was prompted by the recognition that IVET curricula fail to adequately prepare students for the national exams required to gain access to HE through the National Access Contest, is contingent upon higher education institutions (HEIs) making available place for it. Since its implementation, universities have shown reluctance to participate in the SACIVET, while polytechnic institutes continue to be more receptive towards IVET graduates (Amorim, 2022; Silva, 2021).



The selection for the SACIVET considers the course's final grade (mean of subject grades), the final exam's grade, and an admission exam from the HEI the IVET graduates are applying to. Moreover, the law specifies the education and training areas of IVET courses that match the areas of education and training of HE degrees to which IVET graduates can apply (CNAES, 2021). For example, to be eligible for the Education Sciences bachelor's programme, only IVET graduates from courses in the education and training areas of "Support services for children and young people" and "Social work and counselling" are permitted to apply through the SACIVET. IVET graduates from other education and training areas cannot, they are required to pass the specified national entry exams (course and institution). Another example is the Bachelor in Nursing programme available at 39 HEIs in Portugal. For the academic year 2022/2023, eighteen of these HEIs have recruited for the SACIVET. The fields of study that grant admission to the Bachelor in Nursing programme via the SACIVET are Engineering and Related Techniques (Chemical Products Technology), Processing Industries (Food Industries), Health, and Social Services.

The SACIVET is a positive move towards equality, but it could potentially perpetuate the perception of IVET as an inferior form of education in the public eye.

### 3. Methods

For the purpose of this paper, we use a qualitative approach and focus on the analysis of 54 semi-structured interviews with IVET students attending 23 different AC, corresponding to 16 areas of education and training (cf. Table 2) in nine training centres in Northern Portugal. The following research questions concerning the curricula of AC guided the presented research.

- 1) What are the perspectives of AC students on the knowledge conveyed by AC curricula?
- 2) How do AC students perceive the constraints AC curricula impose on access to HE in the Portuguese context?

#### 3.1 Data Collection

A script was used containing questions, probes and prompts designed based on literature review and a previous exploratory case study in a training center. The following questions from the students' interview script were considered for analysis: (i) What do you think about the knowledge you acquire in AC?; (ii) Do you think that you can learn more in AC or in general education?; and (iii) Do you think that what you learn on the course will enable you to take the national exams to access to HE?

The interviews were conducted in person by the first author and took place at the training centres, in quiet rooms, being present only the researcher and the interviewee. The interviews were audio recorded and fully transcribed by the first author.

#### 3.2 Data Analysis

The process of data analysis was made using the NVivo 12® software. We began by creating a deductive category (parent code) named "perspective on the knowledge in the AC" which grouped the references to the curricula of AC, independently of the curricula components. Three subcategories (child codes) were then added: "opinion on the AC curriculum"; "work-context training", and "access to HE", where the content of the interviews related to these categories was coded. For the subcategory "opinion on the AC curriculum", inductive subcategories were added (Table 3), taking into account the sense of the interview texts. The subcategory related to "work-context training" was not considered for this paper as its analysis was previously published (Doroftei et al., 2018).

For this paper, we have concentrated the analysis on the subcategory related to "access to HE", and on the subcategories referred to in Table 3, more specifically, the subcategories related to the sociocultural and scientific components, which are the ones that should correspond to general education and to the contents of the national exams for access to HE.

#### 3.3 Participants

The students participating in this study were attending AC between September 2016 and March 2017, during which period data collection took place. Table 1 presents the composition of the sample of the participant students.

**Table 1** *Sample of participant students*

	Age		Gender		Year of AC attended			
	Min	Max	Mean	F	M	Grade 10	Grade 11	Grade 12
	<b>Interviews (N = 54 )</b>	17	26	21,1	21	33	1	24

**Table 2** *Distribution of the number of young participants by area of education and training*

Abbreviation (PT)	Area of education and training	N (interviews)
A	Craftwork	3
APM	Audiovisual and Media Production	5
CI	Computer Sciences	1
C	Trade	3
CRVM	Construction and Repair of Motor Vehicles	2
CF	Accounting and Fiscal Affairs	-
CB	Beauty Care	2
EE	Electricity and Energy	5
EA	Electronics and Automation	1
GA	Management and Administration	-
HR	Hospitality and Catering	8
ITVCC	Textile, Clothing, Footwear and Leather Industries	6
M	Materials (Wood, Cork, Paper, Plastic, Glass and Other Industries)	5
MM	Metallurgy and Metalomechanics	4
PPB	Protection of People and Goods	2
S	Health	1
STA	Secretariat and Administrative Work	2
TSO	Social Work and Guidance	4
TL	Tourism and Leisure	-
<b>Total</b>		<b>54</b>

### 3.4 Ethical Procedures

Informed consent was obtained and signed by all participants. To ensure anonymity and confidentiality, pseudonyms were assigned to the students. The education and training areas to which the courses are ascribed are reported instead of the course label. The students' pseudonyms are followed by their gender (M for male and F for female), age (in years), school grade, and the Portuguese acronym of the area of education and training (see Table 2).

## 4. Results

### 4.1 Opinion on the AC Syllabi

The aim of this study was to gather the perspectives of AC students on the knowledge conveyed by their courses, with a particular focus on the sociocultural and scientific components of the syllabi.

Table 3 presents all the codes that emerged from the subcategory "opinion on the AC curriculum", ordered by the number of references coded for the interviews. The table also includes references to the technological component. However, this component is not analysed in this text as it is not related to the subjects that are considered for accessing higher education, which is discussed in the present article.

**Table 3** *Opinion on the AC curriculum – results from the interviews*

<b>Codes</b>	<b>References</b>
Subjects are simplified or summarised	62
Subjects are different from general education	12
It should be more practical and less theoretical	12
The technological component is very useful and demanding	9
One learns more in the course than in general education	5
Subjects are interconnected	5
Subjects have applicability in real-life	4
There are subjects that are not useful for the profession	3
We learn more by doing than by listening	2
It does not prepare us to practise a profession autonomously	2
Here we are prepared for a profession, at school to be somebody	1
There is an overlap of content between subjects	1
There are subjects missing from the technological component	1
There are subjects that are obsolete; they no longer make sense	1
<u>In the course, we learn more in practical terms</u>	<u>1</u>
<b>Total</b>	<b>121</b>

Table 3 shows that the code with the highest number of references refers to the easiness of course content, with comments such as “the subjects are simplified or summarised”. This indicates that the perception of the courses being easy is not only from outsiders but also from those with first-hand experience. For example, Jasmine notes that the course syllabus corresponds to lower secondary education:

*Many of them [course contents] are repetitive, we are always doing the same thing. They're very easy – this is like what I was taught in grades 7th to 9th, only in a different way. Often the teachers don't teach the subject because they say it's complicated, so they'll move on or they'll teach something else instead. (Jasmine, F, 18 yo, grade 11, C)*

The simplicity of the curriculum and the way teachers approach it can perpetuate the belief that students are incapable of learning certain subjects, underpinning and internalising this stigma. This reinforces the negative social image of IVET from within the AC. For instance, Raquel notes that teachers evaluate students using worksheets that were previously completed in class.

*In an AC, for example, sometimes you just have to pay attention to what the teacher is saying, and try to understand what she's saying, and you don't even need to study! Because then she'll give you everything spoon-fed, as it's said. For example, she gives you the objectives and, in the objectives, she says the sentence that is on the test. They gave us everything spoon-fed here. For example, in maths, we have study sheets, the study sheets they give us are the same as the evaluation sheets. We have to study through that. It's not a big deal! (Raquel, F, 20 yo, grade 12, CB)*

The social representation regarding the AC curriculum as being a simplified education and its consequent influence on the public image of IVET is very present in the awareness of the students, as Leonardo exemplifies:

*Maybe there's an easiness because of the fact that the contents are extremely basic, that they don't give equivalence to anything, maybe it's because of this basic sociocultural component that people think it's really rudimentary because this component really is. (Leonardo, M, 22 yo, grade 11, ITVCC)*

The simplicity of the curricular content in the sociocultural and scientific components may lead to students internalising failure, which could be a reason for dropping out of courses:

*We try to make sure that people don't drop out because there are many people here who end up... as they feel that... they've also been at secondary school and know what the subjects were like. As they think it's much easier here, they feel a bit... not really discouraged, but they feel as if... if something is missing, and then they get... they get discouraged. And they think about quitting the course because they want something that is a bit more... not harder, but that gives them more benefits... (Nair, F, 22 yo, grade 11, A)*

The code “the subjects are different from general education” reflects this awareness. However, it is important to note that while some students may require a more demanding curriculum, others find the current level adequate as they seek differentiation from general education through IVET. There are differing opinions on

this matter, with some in favour of the difference despite potential constraints on access to higher education, while others oppose it. This contrast is evident in the arguments presented by Angelina and Núria:

*As I came from grade 12, I arrived here and found it a bit strange, because... here they give equivalence to grade 12, but what we teach here has nothing to do with grade 12 of the normal secondary school. So, I don't know... I think... Portuguese, what we teach at the normal secondary school won't be of any use to us. What we teach here is general culture, which is useful for everyone... So, I think this is an added value here. (Angelina, F, 20 yo, grade 11, PPB)*

*Whereas in general education, we have to know that, and there are many things that... that are not taught here, which I think are very important. Portuguese, I almost don't have Portuguese lessons, I don't... I don't learn, I don't talk about authors; they don't encourage me to read a book here – I read because I like to. Now, most of the subjects we have, for example, history... the history we have here is done in four lessons where we have to do three different historical periods; we have to memorise and put it in the test. Whereas in general education, I also had history of art, which is more in-depth we learn there. It is different. (Núria, F, 23 yo, grade 11, A)*

The applicability of the knowledge acquired in the course seems to be at stake on these conflicting perspectives. One view argues that the knowledge acquired in the course does not need to align with that provided in general education. The rationale behind this argument is that the expectations and plans of young people attending AC are exclusively oriented towards the labour market rather than higher education. Therefore, what they learn is deemed sufficient. It appears that some students do not find the knowledge provided by general education interesting. It is important to note that this is not a universal sentiment among students. According to the interviews, even those who attended general upper secondary education up to grade 12, such as Angelina, find it difficult to consider the applicability of its knowledge. However, some participants feel deceived as they expected more in-depth learning in IVET courses, as Nuria points out. Nevertheless, the differences between the AC and general education syllabi prevent access to knowledge included in the national exams for accessing higher education, making it difficult to pursue studies at that level.

The idea of knowledge applicability is also expressed in the code “the subjects have applicability in real life” and is related to another one, which indicates that some participants consider that “one learns more on the course than in general education”. These ideas entail an underlying sense of advantage of AC over general education as participants emphasise the relevance of the knowledge to which they have access, as Diana explains:

*I think everything is much more practical, even at the level of having applicability in the real world. I think it is completely different, I think that what we learn here, we will really apply in the real world. I think that what we learnt in grade 12 [general], no, I honestly could not apply any theorem or an equation, in a problem of everyday life! Not here, here we only learn what is applicable in real life. I think that what we do here is much more useful than what we did in general education. (Diana, F, 23 yo, grade 11, STA)*

Contrasts have been drawn between vocational education and general education that go beyond the dimension of knowledge applicability. Afonso argues that vocational education prepares individuals to exercise a profession, while general education prepares individuals “to be someone”:

*I think we learn more in the course, because in the course we are learning for a profession and in normal education we are learning the subject without it being for a profession. Here the trainers give lessons, but they are teaching to prepare us for a profession, while at school they are preparing us to be someone, so we can get a job afterwards, while here they are preparing us with the focus on a profession. (Afonso, M, 23 yo, grade 12, TSO)*

The concept of “being someone” is projected into the future and appears to be associated with HE in the discourse of these students. Afonso’s statement reproduces a social representation that general education, which is the best preparation for accessing HE, is also the place where young people are prepared to “be someone”, as Pedro also notes.

*Before, I didn't think I wanted to go to university... Now, I got into this school, I started learning things, seeing only engineers and stuff... it gave me that will. Also, if I want to be someone, I have to pursue something [referring to studies]. I can't stay with just grade 12! (Pedro, M, 20 yo grade 12, EE)*

According to these participants’ representations, “being someone” appears to be associated with a particular social status, a specific type of knowledge, and certain careers. It is implicit that the intermediate-level technical jobs for which AC trains are positions that do not allow individuals to “be someone”. This representation, revealed by some of the students, reflects the social representations of general education and HE. To a certain extent, these representations underpin a representation of knowledge related to the concept of “powerful knowledge” (Young et al., 2014; Young & Muller, 2013), which AC does not seem to offer. This also implies that general education is still viewed as having considerable potential for upward social mobility and personal fulfilment.

In summary, the participants find the AC syllabi to be straightforward and simplified, particularly in regard to the sociocultural and scientific components. It is important to note that these topics are familiar to the



students, at least in terms of their labelling, which facilitates comparisons and identification of content previously learned in earlier school years.

## 4.2 Perspectives on the Access to Higher Education

Relying solely on the curricular knowledge outlined in the AC, it is impossible to pass the national exams, as confirmed by IVET teachers and directors of training centres elsewhere (Doroftei, 2020).

Despite this, some students mistakenly believe that the AC's curricular content is sufficient for passing the national exams. According to students, their belief about continuing their studies towards higher education is often reinforced by IVET teachers. While this is not entirely untrue, it does not provide the full picture, as students are not fully aware of the implications:

*J: Yes. I think it does. I've been told that yes, that's an option, so... they say it does.*

*I: Who told you?*

*J: I was told at school – it was a teacher, a trainer of mine. Actually, someone in my class even asked if it gave access to higher education after the course, and I think they said that in principle, it did, so I don't know if it's for sure. (Marcelino, M, 22 yo, grade 12, HR)*

Other students, particularly those who have completed at least two years of general upper secondary education, reject this notion due to their familiarity with the general education curriculum and the topics covered in national exams:

*I think that at the sociocultural level, doing the Portuguese exam, for example, is impossible! Anyone who has only this course could not take the Portuguese exam, or the geometry exam... they are not prepared to face a national exam! Which I think is a huge gap in this type of courses, because if someone thinks of going to higher education they cannot do it, they have to have private lessons. (Petra, F, 24 yo, grade 12, APM)*

Private lessons are often cited as a means of accessing higher education. Students may believe that they can afford to pay for private lessons to study and take national exams if they work to earn money or receive financial support from their parents. This issue is related to their perception of the family's financial situation. As mentioned elsewhere (Doroftei, 2020), despite apparently precarious situations given their parents' professional status, some students feel financially well. This may lead them to believe they can afford private lessons to prepare for national exams, or that their parents would be willing to make such an effort.

*Speaking for myself, for me it is possible. As for the others, I have no idea, but... it's just a matter of making an effort; when a person has an interest in something, they always have to find a way to get there. (Gustavo, M, 21 yo, grade 12, MM)*

Some training centres already have complementary support for this purpose, or some teachers are available to prepare their students to take the national exams. But they do this voluntarily, so this support depends on the goodwill of the teachers and not on a structural offer from AC for students who express the wish to continue their studies in HE. Some students consider that if they work hard to pass the national exams, it is possible to access HE.

*I'm either going to have lessons... with a private teacher, or I'll have to study by myself at home... as my life is a bit complicated financially, I'll probably have to make my own way alone and have to... study by myself at home.*

*The Portuguese teacher has already said that she would help me, if necessary, give me support material so that I can study at home, so... with a bit of effort, I think I can manage. (Wilson, M, 23 yo, grade 11, PPB)*

In summary, two contrasting perspectives were found regarding students' views on the possibility of accessing higher education with the knowledge provided by AC. Some students believe it is possible because their teachers have mentioned it to them, while others who are familiar with the curriculum of general upper secondary education know that this is not the case. Some students may rely on private lessons to prepare for exams, while some teachers may offer voluntary assistance. However, this is not a comprehensive solution to the problem. Structural support for the AC and IVET, in general, could be a more effective solution for students preparing for national exams.

## 5. Discussion

Curricular knowledge in AC presents an equity dilemma. The sociocultural and scientific components are organized to provide knowledge that differs significantly from that found in general education in corresponding school years. The participants described the curricular knowledge of AC as “easy”, which may contribute to a negative public image of the courses. Secondly, some young people attending AC are seeking an education with a different level of demand than what they find in general education. Conversely, others would prefer the level of demand to be higher and see this as one of the reasons contributing to the stigmatization of IVET. The level of curricular demands in AC can have a self-fulfilling prophecy effect on students because they may feel incapable and socially disregarded. This situation aligns with Clavel's (2004) assertion that disadvantaged populations are subjected to pedagogical work aimed at internalising the legitimisation of their exclusion. This assimilates the idea of “inaptitude” (ibidem) to follow the “normal” curriculum (Alves, 2007).

Access to higher education is significantly compromised due to the curriculum's failure to prepare students for national exams, resulting in inequitable outcomes. Connel (1997) argues that the selectivity of the education system at higher levels reduces the learning that can be offered, leading to unequal outcomes despite the system's emphasis on equality of opportunity. Therefore, although the law ensures the continuation of studies, the reality of AC curricula contradicts this possibility in terms of progression to higher education, especially through the National Access Contest. Connel (1997, p. 37) also notes that "if one forces unequal results, a battle for results starts, and the political and economic resources that can be mobilised in this battle are important. It is precisely the poor who have the fewest resources". Although it is important to avoid standardising the young people attending these courses, it is worth noting that their socioeconomic status tends to be low, which may influence their expressed desire to continue studies in higher education. It is also important to consider the weight of the general education curriculum in their entry to apprenticeship courses (Doroftei, 2021). Some believe that they could not succeed in general education and, therefore, would be even less able to succeed in higher education. This is a dilemma of AC's curricular knowledge. It does not serve the purpose of equality of opportunity of access to HE, but rather it seems to serve the purpose of equality of results in the success of obtaining/completing upper secondary education, which for some young people would prove to be a more difficult task in general education. In terms of teaching and learning strategies, upper-secondary general education is heavily influenced by the need to adhere to the national curriculum, as success in the national exams required for higher education is dependent on it. While this article does not delve into this issue, it is worth noting that this is also a problem in general education. The emphasis on a subject-based curriculum designed to facilitate access to higher education also contributes to early leaving from education and training (Santos et al., 2018).

In terms of equal opportunities for accessing higher education, it can be assumed that young people with an AC diploma have the formal opportunity to apply, as they possess a certificate of upper secondary education and can apply through an available form of access. It is worth noting that the Special Access Contest, which was created in 2020, was not available to IVET graduates at the time of data collection and was therefore not mentioned by participants. However, due to the limitations of this form of access, IVET students who choose to apply to higher education through the National Access Contest may face difficulties as the curricular content of sociocultural and scientific subjects, such as *Living in Portuguese* and *mathematics*, does not align with the national exam requirements. Only individuals who have attended general upper secondary education up to grade 12 or those who have the means to afford private lessons or self-study of the exam topics are likely to be able to apply for higher education through the National Access Contest. The Apprenticeship System's objectives of preparing for the labour market justify AC's lack of preparation for national exams and the level of knowledge expected in the sociocultural and scientific components. Therefore, progression to higher education is not a priority for the Apprenticeship System. The challenge of accessing higher education, which is not only associated with AC but with Portuguese IVET in general, appears to contribute to the public perception of this education pathway. This is often linked to the perceived simplicity of the curriculum (cf. Doroftei & Silva, 2024). We agree with Te Riele and Crump (2002) that improving access to higher education is crucial for changing the social perception of IVET. It could be argued that the majority of young people who attend IVET do not intend to pursue higher education; however, there is always the possibility that they may change their minds during or after their training or even afterwards when they are already in the labour market.

Young people from disadvantaged backgrounds, including many AC students, may lack material and affective resources as well as power (Baker et al., 2004). However, this does not imply that they are incapable of acquiring "powerful knowledge" (Young, 2016) through engaging and motivating learning strategies, that is, through a "meaningful education" (McGregor et al., 2015).

Tarabini and Jacovkis (2019) argue that abstract knowledge is necessary for understanding and questioning power relations in personal and professional life, as well as for critical reasoning. The levelling down of the AC curricula poses a challenge in improving one's ability to understand and analyse the world and cultivate a reflective mindset beyond professional skills (Nussbaum, 2014; Young et al., 2014). It is important to recognise that these skills and knowledge are also necessary in the workplace. Similarly, it may limit the acquisition of key competencies for lifelong learning (European Commission, 2019), which are fundamental for personal and professional development. Thus, it should be emphasised that the issue at stake here is to consider that it is possible to reconcile IVET with "powerful knowledge" (Young et al., 2014), while keeping up with "meaningful education" (McGregor et al., 2015) and equity.

## 6. Conclusion

This paper presented the participants' perspectives on the AC curriculum and the knowledge underlying it, as well as their perceptions of the possibility of accessing HE after completing the course.

The perspectives of AC students have disclosed that the sociocultural and scientific syllabi at AC are equivalent to lower secondary education (grades 7 to 9), despite being given equivalence to upper secondary

education (grades 10 to 12). Achieving a true equivalence of knowledge between the sociocultural and scientific components of AC and the general component of general education could facilitate the permeability between educational tracks outlined in the law. Additionally, it could promote greater parity of esteem between vocational and general education, thereby reducing the stigma associated with vocational education and training.

This research is relevant because it explores the relationship between the curricula of IVET and the stigma surrounding this educational path in Portugal (Doroftei & Silva, 2024) from the perspectives of IVET students. It may be beneficial to consider how IVET curricula impact the public perception of vocational education in other contexts. Furthermore, it would be valuable to investigate the perspectives of employers and educators regarding the difficulties and possibilities presented by IVET syllabi.

This paper does not explore the role of higher education institutions in shaping the knowledge imparted in upper secondary education. Additionally, it does not delve into the value of general education and its alignment with Michael Young's concept of "powerful knowledge". Future research should investigate these areas of interest.

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## Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

## Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** Alexandra Doroftei; **data collection:** Alexandra Doroftei; **analysis and interpretation of results:** Alexandra Doroftei, Sofia M. Silva; **draft manuscript preparation:** Alexandra Doroftei. All authors reviewed the results and approved the final version of the manuscript.

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