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# **Tracking, Knowledge, and the Organisation of Secondary Schooling: teachers' representations and explanations**

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## **Abstract**

Most European secondary-school systems are articulated by different forms of an academic-vocational divide that are critical in understanding the (re)production of social inequality. By providing distinct curricular and pedagogical codes and a markedly different distribution of knowledge between tracks, tracking leads to profound and distinct learning opportunities for students. The objective of this article is twofold: first, we wish to enquire into the relationship between tracking and knowledge distribution as explained and represented by teachers; second, we aim to identify the mechanisms explaining this relationship as acknowledged in these actors' discourses and experiences. The analysis draws on 72 in-depth interviews with principals, coordination teams and tutors from lower-secondary education, the Baccalaureate and VET in eight schools in Barcelona. The results provide, on the one hand, a thick description of the dichotomised attributes that teachers assign to academic and vocational knowledge. On the other, we identify three principal mechanisms that, according to the school actors who were interviewed, explain the segmented distribution of knowledge between the Baccalaureate and VET: the stratification of the school system, the grammar of secondary schooling and the learning cultures of both tracks.

**Keywords:** knowledge; curriculum; VET; Baccalaureate; Grammar of schooling; tracking; social inequalities

## **Introduction**

The organisation and distribution of school knowledge is a key dimension in explaining the (re)production of social inequalities within the education system (Young et al., 2014). Far from being neutral, school knowledge reflects the patterns of social stratification and, as such, is charged with political and social meaning (Nylund and Rosvall, 2016). One of the main dividing lines that has historically characterised the distribution of different types of knowledge for different students is the structuration of education systems into

distinct tracks (Oakes, 1985; Shavit and Müller, 2000), and particularly the academic-vocational divide (Nylund, Rosvall and Ledman, 2017).

The literature that addresses the relationship between tracking and knowledge is abundant, especially but not solely within the vocational track. Earlier research has shown how knowledge distribution between tracks is based on classification criteria grounded on naturalistic and dichotomous conceptions of students' abilities (Oakes, et al., 1997; Korp; 2011). These conceptions, crystallised in different curricula and modes of assessment, are biased towards particular capabilities that are more present and valued within schools and realised through different tracks (Lynch and Baker, 2005). Schools in fact give more credit to those forms of knowledge and to those capabilities associated with the middle- and upper-classes, those related to abstraction and generalisation, whilst neglecting the particular modes of knowledge pertaining to the working-class, and especially those modes related to description and execution (Bernstein, 1971). Within the specific case of VET, research has shown how recent educational reforms in different countries have led to a progressive fragmentation of the curricular provision between the academic and the vocational tracks, and particularly to an increasing disengagement of VET from general, abstract or theoretical knowledge in favour of reinforcing its practical and procedural aspects (Gamble, 2006; Nylund, Rosvall, and Ledman. 2017; Wheelahan, 2007).

Our article relies on this evidence and proposes a complementary approach aimed at further understanding the relationship between tracking and knowledge as explained and represented by secondary school teachers of lower-secondary education and distinct Baccalaureate and VET tracks. By giving voice to these actors, our analysis aims to provide a thick description of the dichotomised attributes assigned to academic and vocational knowledge. Simultaneously, our approach attempts to identify the mechanisms explaining the segmented distribution of knowledge between the Baccalaureate and VET as acknowledged in teachers' discourses and experiences.

To achieve these goals, the article develops a qualitative analysis based on in-depth interviews with principals, coordination teams and tutors from lower-secondary education, the Baccalaureate and VET in eight schools in Barcelona (Catalonia-Spain). The focus on the Catalan case is of relevance for several reasons (authors, 2020). First, Catalonia is one of the regions in the European Union (EU) with a most polarised educational structure, resulting in less than 25% of people between 15 and 64 years old with upper-secondary education (as against the 46.3% EU average). Second, it is also one

of the most challenging European cases in terms of its rates of Early School Leaving that, in 2019, still affected 17% of young people as against the 10% EU average. Finally, it is a region in which VET has been historically underdeveloped and discredited, resulting in less than 45% of students enrolled in this track.

The structure of the paper is as follows: in the first section, the theoretical approach of our analysis is presented. The second section briefly introduces the context of the study, further explains the methodological approach and specifies the fieldwork undertaken. Following this, the results of the analysis are set out through a detailed examination of teachers' attributions of different types of knowledge for different upper-secondary tracks and the mechanisms that they highlight in attempting to understand the segmentation of knowledge. By way of conclusion, the final section offers closing reflections on the analysis undertaken.

## **Theoretical Approach**

### ***The tracked structure of the European educational systems***

The importance of knowledge in explaining social inequality has been a central concern in the study of social sciences and education since the publication of Young's *Knowledge and Control* (1971). From that time, many other scholars (Bernstein, 2000; Connell, 1993) have shown how school knowledge reflects the principles of selection and social stratification that are the basis of society and, thus, cannot be considered as objective or neutral. School knowledge and social structure are bidirectionally related. On the one hand, the production and distribution of school knowledge is determined by the kind of power and social control that characterises a society. On the other, the way school knowledge is organised generates distinct opportunity frames for those participating within it, which contributes to explaining the structure, characteristics, and intensity of social inequality (Connell, 1993).

In the work from his final phase, Basil Bernstein (2000) distinguished among the different types and structures of knowledge and reflected on their implication in terms of social inequality. Based on the original distinction made by Durkheim, Bernstein enquired into the differences between esoteric and mundane knowledge. The former is abstract, can be acquired and transmitted independently from context, and is based on a vertical structure of meaning integration, which is coherent and explicit. The latter, in contrast, is specific, and is context-dependent both in its transmission and its acquisition. It integrates meanings based on a horizontal structure that is organised in particular

contexts of practice. According to Bernstein, while this division is universal, the specific content of both types of knowledge is historically, culturally, and institutionally determined. As is their implications in terms of social inequality.

The social value attributed to each type of knowledge is, then, contingent—and consequently mutable. However, despite neither of them being intrinsically “better” than the other, their rules of production, transmission and acquisition are different. And that leads to different forms of organising the experience of learning and, in particular, that of school experience (Young, 2006). Moreover, and despite the above observation, whilst one type of knowledge may indeed be considered “better” than the other with respect to certain purposes, both allow accessing different (and unequal) types of power. In mundane knowledge, power comes from its immediacy regarding everyday life and practical experience. In contrast, the faculty of realisation—the ability to establish connections and to project (Young, 2006)—is specific to esoteric knowledge and provides the power to think beyond immediate realities, to understand and explain the world, and to imagine the future through surpassing current frameworks of understanding (Wheelahan, 2007). This is what Young (2013) has conceptualised as powerful knowledge in contrast to that linked to a particular context and whose boundaries cannot be transcended.

Although a binary conceptualisation of knowledge was nuanced by Bernstein in his last work (Young and Muller, 2014), the dual understanding of knowledge has had a clear impact on the organisation of most formal educational systems, and is expressed in curricular forms, pedagogical practices and modes of assessment that persistently give greater credit and value to one of its most particular forms: the theoretical or academic (Lynch and Baker, 2005). The division between the academic and vocational tracks that characterises many European education systems is particularly relevant to understanding segmentation in the modes of knowledge provision. As previous research has shown (Hickox and Lyon, 1998), in broad terms the academic track is aimed at accessing higher education and is thus more related to abstract knowledge. In terms of organisation, it is commonly structured vertically, according to the subjects in its curricula. The vocational track, in contrast to this, is oriented towards providing practical knowledge to students in order to equip them to enter the labour market immediately after its completion. In this sense, the debates on the suitability of unifying or stratifying upper-secondary education (Nylund et al., 2017) are connected to broader discussions on the purposes of developing one type of knowledge or another, and on the opportunities that this provides to students.

### ***The organisation and distribution of school knowledge***

In light of this evidence, and in order to properly understand the relationship between tracking and knowledge, it is of crucial relevance to reflect on the following questions: How does the structure of different educational systems contribute to the uneven distribution of students between tracks? How does secondary schooling, both in its lower and upper modalities, organise and distribute different types of knowledge in the curriculum? How do differences in the aims and the prestige attributed to different educational routes affect the opportunities provided to students?

First, regarding the distribution of students between different tracks, a broad corpus of literature has explored the degrees of social selectivity within different educational systems and its correlation with access and social-inequality outcomes (Dupriez, Dumay, and Vause, 2008). In this context, tracking and streaming have been highlighted as the organisational practices that best serve to legitimise different pedagogical models and different curricular forms for different types of students (Oakes et al., 1997). Additionally, insofar as tracking takes place in most European countries within the transition from lower- to upper-secondary education, this moment has been identified in the literature as a critical point in the reproduction of social inequalities in terms of class, gender and ethnicity (Authors, 2018).

Second, related to the organisation and distribution of knowledge within the education system and its impact in terms of inequalities, many scholars have analysed how particular types of knowledge and abilities—those of the middle-class—are legitimised by schools as if they were the only ones valid to succeed in education (Lynch and Baker, 2005; Nash, 2002). Bernstein (1971) analysed the predominance of middle- and upper-class codes in school culture (the elaborated codes) and used the familiarity that middle-class students have with such codes to explain their higher school success. Other approaches within this line of research have focused on the embeddedness of a *school grammar*, of an organisation of the curriculum and of the school practices that are taken for granted and normalised in such a way that non-compliance with them is considered a failure (Tyack and Tobin, 1994). In the same line of inquiry, the institutionalisation of a particular definition of school normality and of the “ideal student” has also been explored as a means for excluding those students that do not fit into these definitions (Archer, 2005; Authors, 2017; Macrae, Maguire, and Milbourne, 2003).

The interplay of all these elements helps us to understand the higher attachment that the middle-class shows to the academic track, due to its greater familiarity with the

kind of knowledge prioritised by the track, which is—at the same time—valued more highly within and outside the school. In fact, sociological and educational literature provides robust evidence to prove that the academic tracks tend to concentrate a higher percentage of middle-class students than the vocational tracks (Authors, 2020). Simultaneously, this literature provides sound explanations for the prevalence of the middle-class in the academic track; these explanations are closely tied to the reasons forwarded for their educational success in lower-secondary schooling. In contrast, the working-class, in aggregated terms, tends to show more distance from and rejection towards an abstract type of knowledge to which it has been less exposed through its educational trajectory and by which it is less recognised and represented (Lynch and Baker, 2005).

And third, regarding the relationship between the purposes attributed to each educational route and its impacts on students' opportunities, the literature signals the crucial relevance of the learning cultures (Hodkinson, Biesta, and James, 2008) in understanding how students are expected to be present in distinct tracks and for which purpose. Focusing on VET, Colley et al. (2003) have shown how dominant cultures of teaching and learning in this educational route contribute to the definition of a professional habitus among students that is oriented towards satisfying the requirements for an obedient and disciplined workforce. Research into the interaction or division between theoretical and practical knowledge has been particularly fruitful in the field of VET, and especially in England (Young, 2013), South Africa (Gamble, 2006), Australia (Wheelahan, 2007), and more recently in Sweden (Nylund and Rosvall, 2016; Nylund et al., 2017). These analyses show the general and progressive reduction of theoretical elements and of the interaction between theory and practice in VET curricula, and the increased centrality of technical aspects closely linked to particular job placements and to the aim of immediate employability. Although VET is linked by definition to local practices, the contextualisation of knowledge in the curriculum can be organised according to different principles which, at the same time, imply different learning conditions. Moreover, as highlighted by Gamble (2006), the historical hallmark of VET has been the combination between theory and practice. However, recent reforms that VET is undergoing in many countries are weakening this combination in favour of competence-based training, which reduces students' educational, labour market and life opportunities (Wheelahan, 2007).

In this context, the development of powerful knowledge seems to be increasingly reserved for those accessing the academic track insofar as it is devoted to allowing the integration of the global with the local, of the universal with the particular, of the context-independent with the contextual. How then can access be guaranteed for all students to this knowledge, particularly when it is those from the working-class who are—as shown—most distant from it?

### **Context of the analysis and methodology**

As pointed out in the introduction, this analysis aims at exploring the relationship between tracking and knowledge distribution in upper-secondary education and to identify the mechanisms explaining this relationship in teachers' discourses. These aims are framed within a broader reflection on the limits of the current structure of secondary education to providing equivalent and equitable opportunities for the Baccalaureate and VET students.

In this regard, it is important to highlight that the Catalan secondary education system is organised around two main stages. The first of these, lower-secondary, cover 4 grades (from 12 to 16 years old), is compulsory and formally comprehensive. It is considered to belong to the “uniform integration model” (Mons, 2007) in which, beyond formalities, the scarcity of individual teaching resources and distinct unofficial ability grouping practices generate sharp differences in the students' learning opportunities (Authors, 2018). The second stage, upper-secondary, is divided into two tracks, the academic—Baccalaureate—and the vocational. In Catalonia, most schools providing lower-secondary education also offer the Baccalaureate, with which they share not only facilities but also teaching staff. In contrast, the supply of VET is far more limited in quantitative terms, and is also spread across the territory rather than being centralised.

In order to develop this analysis, the methodological approach follows the contributions of the Critical Discourse Analysis (CDA). Under this logic, actors' discourses and meanings have to be understood as social practices and, as such, they incorporate elements both of structure and agency (Fairclough, 2003; Sayer, 2000). In this respect, discourses contribute to constructing social realities within a framework of possibilities and limitations that are inherent to the material world. On their structural side, discourses are particular ways of representing the world or some of its parts; on their agential side, they also have the potential to transform the world in which they have been produced and which they represent (Fairclough, 2003). Social representations are

expressed through forms of speaking, communicating, and transmitting. Discourses reflect—but also produce—shared imaginaries, frameworks of reference that are relevant in shaping the social structure. In this sense, the social conditions in which discourses are produced refer to the social, political, cultural and economic context that makes a particular articulation possible among social practices, discourses, and other non-discursive social elements.

In our particular case of study, teachers' discourses are inscribed in a very segmented structure of the upper-secondary education provision. This structure conditions the production and realisation of their discourses; it establishes the frame of reference to organise their voices, relationships and practices. In this sense, our analysis aims to explore how this segmented structure, in terms of its functions, social composition and curricular provision is signified, legitimised or even questioned by teachers' discourses. In other words, we want to delve into the mechanisms of social inequality linked to the tracking of upper-secondary schooling that are reflected in teachers' voices. We are especially interested in the way they describe and explain the dichotomy between theoretical and practical knowledge and in the rationales they mobilise to explain it.

The analysis is based on 72 in-depth interviews with principals, coordination teams and tutors from lower-secondary education, the Baccalaureate and VET in eight schools in Barcelona.<sup>1</sup> The schools were selected on the basis of their offering lower-secondary and both tracks of upper-secondary education, and also as they combine different heterogeneity criteria such as ownership, social composition and the different types of upper-secondary supply. Interviews were conducted in the schools and had an approximate duration of 60 minutes. All interviews were transcribed verbatim and were then analysed using coding and thematic analysis<sup>2</sup>. The coding strategy combined a deductive and inductive strategy, following the logic of the grounded theory (Glaser and Strauss, 1967) and was composed of 10 main codes that were subsequently grouped into 4 themes to develop a general understanding of the data (see Table 1). The codes related

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<sup>1</sup> These interviews were conducted by a collaborative team of six researchers, including the two authors of this article, working under the same research project for a period of four years. The analysis of the interviews for the purposes of this paper has been exclusively developed by the signing authors. Along with the interviews to the teaching staff, the fieldwork of the project (details removed for peer review) in Barcelona includes—among other aspects—28 in-depth interviews with policy makers; 68 interviews with upper secondary students; and a questionnaire with 1.318 with young people in the first course of Baccalaureate and VET.

<sup>2</sup> All the interviews were conducted in Catalan and thus, the translation to English of the selected quotations in the results section may have led to the loss of some nuance in terms of the informal, messy or even slang language used by teachers. In spite of that, the selected quotations are accurate to the practical and discursive sense of the interviewed teachers.

to Knowledge and Stratification were the ones deductively provided before starting the qualitative analysis of the data. The codes connected to the Grammar of Schooling and the Learning Cultures were generated during the reading and systematisation of the empirical material.

Table 1. Codes and themes for qualitative analysis

Codes	Themes
Knowledge attributes	Knowledge
Knowledge distribution	
Knowledge prestige	
Track planning	Stratification
Track purposes	
Track prestige	
Track social composition	
Structure of the system	Grammar of Schooling
Connections between educational stages	
Pedagogical modes	Learning Cultures
Curricular provision	

Due to the scope and the space of this article, the analysis of the teachers' discourses will focus on their commonalities rather on their internal differences. Thus, even if there are certain differences in the teachers' discourses according to the schools and tracks where they work we won't deepen into them. As a sort of example, teachers working in the most deprived schools in terms of social composition tend to be more critical on the whole segmented structure of the upper-secondary provision. Simultaneously, teachers' working in VET tend to express a less dichotomous discourse regarding the distribution of knowledge in each track. In the results section, we will particularly stress some of the differences between Baccalaureate and VET teachers, but the general logic of the analysis will be oriented to identify their general perception of the

relationship between tracking and knowledge distribution, as well as to uncover the mechanisms they stress to make sense of this relationship.

## **Findings**

### ***Different knowledge for different tracks: teachers' descriptions and attributions***

The first section of our findings aims at exploring the relationship between tracking and knowledge as explained and represented by teachers. We describe this relationship according to the associations, attributes and meanings that our interviewees attach to the different knowledge provided in different upper-secondary tracks.

The first element arising from the analysis of these interviews is a strong classification (in Bernstein's terms) of the type of knowledge provided in the academic and vocational tracks. Principals, coordination staff and tutors clearly acknowledge that the Baccalaureate and VET are broadly articulated around a sharp distinction between theoretical and practical knowledge, around esoteric and mundane knowledge. As the following quotations show, the knowledge attributed to the Baccalaureate is theoretical, conceptual, abstract and deductive, especially in the more selective forms such as the International Baccalaureate.<sup>3</sup> In contrast, the knowledge provided in VET is specific, highly context-oriented and aimed at solving specific problems.

In contrast with the Baccalaureate, VET has a much more practical curriculum, oriented towards solving specific problems, connected with the specificities of their future workplaces (VET Coordinator, School 4).<sup>4</sup>

The main feature of the International Baccalaureate is to provide our students with critical thinking, with reflection and research. One of the central elements is to provide a deep theory of knowledge, a high level of abstraction (IB coordinator, School 2).

Moreover, the dichotomy between theoretical and practical knowledge is discursively marked by the use of attributes that indicate the unequal status of, and prestige associated to, the different types of knowledge and, as a consequence, to the distinct upper-secondary tracks. As indicated in the theoretical approach of this paper, the presence, representation and treatment of different forms of knowledge both within the

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<sup>3</sup> The International Baccalaureate (IB) is a highly selective modality of the academic track, mostly supplied by private schools; on successful completion, it provides access to different universities around the world.

<sup>4</sup> The names of the interviewees and of the schools have been omitted to protect the anonymity of our participants.

school system and the labour market is strongly mediated by power dynamics and axes of social inequality (Young, 2006; Wheelahan, 2007). It is precisely the academic knowledge that has greater credit and respect within the organisation of most education systems and within their modes of curricular provision. It is this knowledge that is linked to the most prestigious and socially recognised types of occupations. And this different scale of prestige is also clearly recognised in the discourse of our interviewees.

As shown in the following quotations, theoretical knowledge is understood as fundamentally difficult, bounded to a broad conception of ‘culture’ and not accessible to all types of students. Practical knowledge, in contrast, is systematically linked to attributes such as easy, simple or effortless; it is never connected to the concept of ‘culture’ and it is also considered to be accessible to everyone. Moreover, these qualities are usually expressed as if they were natural, inherent to each type of knowledge, and not related to particular socio-historical, cultural, political and institutional contexts.

Some students struggle a fair bit in the Baccalaureate because the subjects are difficult; they have to study a lot, and not everyone is cut out for it (Principal, School 5).

They do have to study in VET, but it’s almost nothing. It’s difficult to imagine anything less demanding. This is the minimum. They really can’t claim that it’s difficult, because it’s not (Pharmacy VET Tutor, School 6).

The hierarchy between theoretical and practical knowledge exists *de facto* in the interviewees’ discourses and becomes even more evident and complex when they focus on specific types of VET and Baccalaureate, such as Mechanics, Arts or Industrial design, among others. In these cases, the attributes assigned to different types of knowledge make use of metaphors such as the following: ‘dirty-clean’, ‘passive-active’ or ‘routine-innovative’. The clearest example in this sense is that of industrial VET studies that, despite having a high rate of professional insertion, as the interviewed actors unanimously point out, do not have enough demand among young people. And the main argument for this mismatch, they argue, is precisely that there certain studies are perceived as ‘dirty’ and linked to the classic blue-collar professions.

It’s not easy to motivate a youngster to choose a VET track that projects an image of dirty, heavy, unpleasant work. Remember our image of cooking 10 years ago. The kitchen was perceived as a space filled with of stoves, smoke, and blackness. A place situated at the end of the restaurant, hidden and dark, where your hands

got dirty and you ended up smelling bad. But this image has been completely replaced. Now the image of the kitchen is white, clean, centrally situated in the restaurant, visible... and this is a positive image. (...) All VET types related to this image of dirty hands, associated with the old blue-collar worker are simply unattractive for young people (Principal, School 1).

What is striking about this argument is that the adjective 'dirty' is not used equally to refer to all training itineraries that involve 'working with the hands'. Thus, for example, studying plastic arts or surgery, although this also involves *getting your hands dirty*, whether with paint or blood, is not understood in the same terms. As Lahelma observes (2009:500) 'hands at school are divided into strong, technically competent and possibly dirty hands, and hands that are gentle, caring and artistic'. In this respect, one of our interviewees points out the following:

The fact of getting your hands dirty is already discrediting (...) a doctor works with his hands, yes, but his raw material is human beings, their lives. He is not making screws, as we do (...) The more that the idea of 'dirty' is associated to VET studies and to their related professions, the worse is their image and their social prestige (...) Besides, getting dirty at work is connected with the history of social classes. Those who get dirty, those who risk their lives, those who do not enjoy their work are the lower classes (VET Coordinator, School 7).

### ***Uncovering the mechanisms of knowledge polarisation: teachers' rationales***

The second section in our findings aims at identifying the main mechanisms that explain the segmented distribution of knowledge between the Baccalaureate and VET according to the teachers' interviewed. Due to reasons of scope and space, in this article we refer only to those mechanisms related to the structure of the education system and not to those linked to the attributed capacities and abilities of the students. Thus, references to the students' characteristics are analysed in relation to the curriculum that teachers consider that can be deployed in each track rather than to their explanation of the composition of these tracks in relation to the students' capacities and abilities.

The first mechanism stressed by the teachers' in explaining the dichotomised knowledge provision of the Baccalaureate and VET is the stratification of the upper-secondary school system in terms of their functions. As unanimously acknowledged by all the interviewees, the Baccalaureate is designed as a generalist track oriented towards preparing students for university access, whilst VET is aimed at ensuring rapid insertion into the labour market. And this highly stratified purpose is projected in an equally stratified curriculum between upper-secondary tracks.

Our philosophy in VET is to prepare students to access the labour market; if they want to continue studying, that's great, but this is not our main goal. We have to prepare them for working within a specific profession (Health VET Tutor, School 1).

The Baccalaureate is aimed at continuing formal study, at accessing higher education. But in VET we go hand in hand with business, because our role is to prepare students for the professional world (VET Coordinator, School 2).

Far from being immutable or naturally assigned, the different purposes of the Baccalaureate and VET have to be analysed within specific institutional contexts that generate different meanings and degrees of articulation between the academic and vocational divide (Authors, 2020). As previous literature has indicated, this division is of a political nature and has critical implications in terms of the reproduction of social inequalities (Nylund, Rosvall and Ledman, 2017; Pilz, 2017). Moreover, previous literature has also stressed the crucial need to take into consideration the social composition of vocational and academic tracks in order to properly understand and assess their expected functions in different contexts (Grubb, 1985). As indicated by all our interviews, the highly unequal profile of the Baccalaureate and VET students is precisely one of the main elements that explain the segmented nature of both tracks.

Most of our students [in this VET course] have some kind of educational diagnoses, hyperactivity disorders, dyslexia, and many other types of behavioural problems. We have a student body that is very restless, that has always had trouble adjusting to the school norm. So, we have to work on basic study habits and norms. This really does condition our work and our curriculum (Esthetical VET Tutor, School 5).

Our students are very resistant to curricular content that is more theoretical; they struggle a lot with this kind of knowledge; they are very lazy, very negative when faced with this curriculum, also because they never excelled in it (Health VET Tutor, School 6).

And this segmentation, in both the functions and the social profile of VET and Baccalaureate, leads to the second causal mechanism identified by teachers' in explaining the dichotomised knowledge of both tracks: the grammar of lower-secondary schooling. As indicated previously, the formal comprehensive and non-differentiated structure of lower-secondary education in Catalonia runs alongside multiple forms of *de facto* ability grouping and the meagre use of individualised teaching mechanisms. This 'uniform

integration model' (Mons, 2007) of secondary schooling is based on an emphatic curricular and pedagogical homogeneity, a strong academic orientation and the lack of practical knowledge within the curriculum. In accordance with this logic, the students that do not fit this ideal—that of an academically oriented student, 'naturally talented', engaged and disciplined within the standard school norm (Archer, 2005)—are transferred into the lowest ability groups. This grammar of schooling, as indicated by our interviewees, not only conditions the curricular and pedagogical provision in lower- and upper-secondary education but also in students' and teachers' dispositions within this.

We need to think about our pedagogical models during lower-secondary schooling, which is the way by which we approximate our students to knowledge. We cannot accept that Maths should be considered difficult almost by nature. We need to rethink our modes of transmission, how we make maths fun, approachable, accessible to everyone. And this is the same for all other areas of knowledge (Baccalaureate Tutor in Sciences, School 2).

The world of professions is mostly omitted within lower-secondary schooling and this is a big problem in our system. This absence makes it very difficult to select VET from a positive perspective, something not related to the idea of rejection (...) Our students have no positive references from the world of work (VET coordinator, School 7).

Moreover, as indicated in the following quotation, lower-secondary schooling and the Baccalaureate in broad terms share the same form of curricular provision, based on the predominance of theoretical knowledge, whilst practical knowledge is exclusively relegated to the realm of VET. This clearly generates a symbolic image of 'natural continuity' between the lower-secondary and academic track both in the minds both of students and teachers. VET, in contrast, is projected as the 'exception', as the 'subsidiary track':

Lower-secondary schooling and the academic upper-secondary track have the same curricular structure, but this is not the case for VET. The curricular design of VET is very specific to the kind of professions for which you are preparing your students to work in (Principal, School 6).

The perception of lower-secondary education and the academic track in terms of a 'symbolic whole' is also reinforced by guidance mechanisms that systematically direct the 'less able students' towards VET and discourage those considered as 'good students' from enrolling into this track. As shown in the following quotations, guidance is based

on an unequal structure of prestige as regards both tracks, which systematically directs those students with low learning results or those enrolled in the lowest-ability groups during lower-secondary education towards VET. And this converts VET into almost a safety net for minimising the damage of social and educational exclusion; in effect into a Green Dot for recycling, as one of our interviewees makes explicitly clear:

When you have a student who struggles to pass the courses in lower-secondary; a student who gained a lower-secondary certificate with a huge amount of effort, the general guidance criteria is to direct this student towards VET (VET Counsellor, School 3).

As a teacher, you can easily see if a student is academic or not and the Baccalaureate is mainly academic. If students have been struggling with grades during their compulsory schooling, if they have problems with their habits... then... of course... this is basically pointless. Don't send these students to the academic track; they're just going to fail (IB coordinator, School 2)

Metaphorically speaking, VET is like the famous Green Dot for recycling. It's a place where you can recycle things that you no longer want (Sports VET Tutor, School 5).

The last explanatory mechanism highlighted by our interviewees refers to the different learning cultures of both tracks in upper-secondary education. Reference to learning cultures, in fact, allows for a far more complex reflection on the relationship between educational tracks and knowledge distribution than that presented at the beginning of our findings. As shown in the following quotations, VET teachers' state that the main feature of VET is precisely its articulation between theory and practice. Practical knowledge is therefore more relevant in this track, which does not imply the absence of any kind of theory. Rather, on the contrary—as indicated by Gamble (2006)—the articulation between theory and practice (and not practice alone) has been one of the most salient features of the vocational curriculum. And this is unanimously emphasised by principals, pedagogical coordinators and tutors working in VET. Moreover, these actors are precisely those who criticise the current curricular politics of Catalan VET for prioritising the role of this track in the preparation of workers, whilst neglecting its critical role in the preparation of citizens (Nylund, Rosvall, and Ledman, 2017).

We should always have a theoretical basis. Our students should have a few basic and well-grounded ideas; some basic conceptual elements. Of course, I can explain these concepts in various ways, pedagogically speaking, but that does not

exempt VET from theory. We *need* theory; it is essential to make sense of our practice. (Commercial Activities and Fashion VET Tutor, School 3)

What we are trying to do in VET is to go back to the idea of the craftsperson (...) A craftsperson is someone who works with their hands, but not in a mechanical or industrial manner. The craftsperson is someone who controls, who decides what product they want to make. And that involves creativity, independence, and thought. Head and hands cannot be separated (Esthetics VET Tutor, School 5).

Within the Baccalaureate, there are some additional voices, even if somewhat fewer than within VET, who make certain critical statements on the nature of the curriculum and the supposed provision of a higher-order type of theoretical knowledge. These voices, as reflected in the following quotations, state that the current organisation of the Baccalaureate, rather than focusing on the development of complex, theoretical and critical thinking among its students, is aimed at preparing them to pass exams, and in particular the standardised test to access university.

Our Baccalaureate is very dependent on university-access tests; this conditions our curriculum, our pedagogy, our *everything*. These exams are still conceived as mostly memory-based, and this leaves us no room for innovation (Principal, School 8).

The high academic standards of the Baccalaureate are justified by the system to access university and particularity by its entry exams. The whole system is erroneous in this regard. Our Baccalaureate students spend two years suffering because of the pressure; and we teachers are suffering because our pedagogical methods and our curriculum are very constrained by those exams (Artistic Baccalaureate Tutor, School 1).

## **Conclusions**

The objective of this paper has been to delve into the relationship between tracking and knowledge as explained and represented by teachers. Our interest has been, particularly, directed towards exploring the attributions that principals, pedagogical coordinators and tutors from different types of the Baccalaureate and VET in Barcelona assign to academic and vocational knowledge within a tracked upper-secondary system. This discussion has also aimed at identifying the mechanisms that explain the segmented distribution of knowledge between the Baccalaureate and VET as acknowledged in the discourses of the teacher staff. This approach aims to contribute to the current literature on tracking, knowledge and social inequalities by situating teachers' voices and rationales at the centre of all such analysis.

Previous research has provided a host of evidence demonstrating the need to develop sociological analysis aimed at unmasking the social construction of school knowledge and at discovering the principles for its selection and organisation (Young, 1971). School knowledge reflects the patterns of social stratification and is a critical asset for the dominant classes to maintain and reproduce their power. This is why curricular provision, pedagogical modalities and modes of assessment for schools should be problematised within sociological research. In fact, the organisation of most formal education systems gives more credit, value and recognition to one particular type of knowledge, namely the theoretical, whilst relegating practical knowledge into the realm of ‘non-knowledge’ (Lynch and Baker, 2005). This is particularly salient in the case of the tracking practices that, in one way or another, structure education systems at a global level and, particularly, within the academic-vocational divide. As previous research has shown, in most countries academic and vocational tracks are structured within a deep segmentation of knowledge provision that has been further increased and crystallised with recent VET curricular reforms (Gamble, 2006; Nylund, Rosvall, and Ledman, 2017; Wheelahan, 2007).

Our analysis contributes to the current field of research by providing new evidence that facilitates a thick description of the dichotomised attributes that teachers, both in the Baccalaureate and VET, assign to different types of knowledge. It also contributes to this field by pointing out the mechanisms relating to the structure of the education system that leads to this dichotomy. The main conclusions of our analysis are the following:

First, all the actors interviewed acknowledge that the Baccalaureate and VET are articulated around a broad distinction between theoretical and practical knowledge that, far from being purely descriptive, is loaded with distinct scales of prestige. As shown in the teachers’ discourses, theoretical knowledge is mostly associated with notions such as difficulty, high demand or hard work, whilst practical knowledge is linked to attributes such as ease of effort, simplicity or lack of exertion. This hierarchy is reinforced when interviewees focus on specific types of VET and Baccalaureate, in which notions such as ‘dirty’ and ‘clean’ are mobilised to explain the features symbolically attributed to different knowledge areas, different modalities of study and different typologies of work. In short, VET studies in general—and particularly those related to the industrial sector—are perceived in terms of ‘easy mind’ and ‘dirty hands’ projecting a discredited image of the self with which young people do not wish to be associated.

Second, our interviewees argue that the stratification of the upper-secondary system in terms of its functions and social composition is a clear explanatory factor in understanding the dichotomised knowledge provision of the Baccalaureate and VET. On the one hand, the functions of both tracks are increasingly segmented: the Baccalaureate is oriented towards preparing students to continue formal study, whilst VET is aimed at ensuring swift insertion into the labour market. On the other hand, the student composition of both tracks is clearly polarised in terms of their social profile: the academic track concentrates the highest percentage of the middle-classes, whilst the vocational track is over-represented by working-class, migrant and ethnic minority students. And this double segmentation, as indicated by all our interviews, is one of the main elements in understanding how the hierarchy between the two types of knowledge is constructed through its embeddedness in the structure of the education system and its attachment to students' socioeconomic characteristics.

Third, our interviewees also identify the grammar of lower-secondary schooling as a key mechanism in understanding the segmentation of school knowledge between the Baccalaureate and VET. As we have argued, lower-secondary schooling in Catalonia is based on a high curricular and pedagogical homogeneity, a strong academic orientation and a lack of practical knowledge within the curriculum. It also features multiple forms of *de facto* ability-grouping running within a system that is formally comprehensive. Moreover, the mode of curricular provision of lower-secondary schooling is the same as in the academic upper-secondary track. These elements contribute to transmitting the message that the 'able student' is academic, and that the 'correct track' is the Baccalaureate.

Fourth, the last explanatory mechanism highlighted by our interviewees refers to the distinct learning cultures of both tracks in upper-secondary education. In fact, most of the interviewed VET teachers' are highly critical of the dichotomous conceptions of knowledge within both tracks. They argue that the intrinsic feature of the VET curriculum is the articulation between theory and practice, and criticise recent reforms that reduce VET knowledge to merely practical and procedural aspects. VET is by nature related to the practical aspects of professional activity, which does not mean that it has to be exclusively embedded within the realm of mundane knowledge. Some of the interviewees within the academic track also highlight certain critical elements within the organisation of the Baccalaureate that facilitate fuller understanding of knowledge polarisation between tracks. The most salient element in this regard is the influence that university-

access test have on the curricular provision of the Baccalaureate, a curriculum that ultimately ends up being oriented towards simply training students to pass exams.

As a whole, our results highlight the relevance of an approach that analyses the characteristics of the academic and the vocational tracks, but also the existing relationship between them, understanding that both are necessary to comprehend how education is constructed as a positional good. Regardless of the dynamics and features of each track, the analysis of the teachers' discourses reveals how the knowledge divide, the stratification of the upper-secondary education, the school grammar and the learning cultures interplay and contribute to explain how the organisation of secondary schooling impacts on the (re)production of social inequality.

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