

Original Paper

Snakes and Ladders: The Impact of Tracking on the Possibility of Attending Higher Education for Second-Generation Migrants and Native Students in France and Germany

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Abstract

Second-generation migrants comprise a large proportion in Europe, but recent research has figured out that their educational achievement has considerable gaps between that of their native-born counterparts. This paper chose France and Germany as examples to compare their educational systems, particularly on the tracking system and its impact on the accessibility of tertiary education for second-generation migrants and native-born students, with the application of Contrast of Context and cultural reproduction theory, then it figures out that the tracking system influences the possibility of entering to the types of higher education institutions to some extent but deserves further research.

Keywords

Second-generation migrants, tracking, higher education

1. Introduction

In 2021, 7.1% population aged 15-74 in the EU are second-generation migrants, while in both Germany and France, this proportion reaches 12.9% (Eurostat, 2023a). Second-generation migrants refer to individuals born and raised in a country where their parents immigrated from another country (EMN, n.d.) and have pursued their entire education in the host country (Crul et al., 2013). Theoretically, second-generation migrants should have the same life chances as their native counterparts, irrespective of their parental identity and their ethnicity. However, many pieces of literature identify many challenges that impede the individual development of second-generation migrants, including potential discrimination, social exclusion, employment barriers, and unequal educational achievements and attainments. According to existing research focusing on second-generation migrants' academic achievement and educational attainment, it is evident that there are considerable gaps between students

of migrants and students of non-migratory backgrounds (Crul, 2013; Siahaan et al., 2014), especially in key school subjects and problem-solving skills (OECD, 2006), which may impact the possibility of attending a higher level of education and cause life-long effects. As Crul (2013) discussed, students of second-generation migrants possess a small proportion in German higher education institutions, whereas the percentage in France is still large and diverse. This phenomenon reflects that the accessibility to tertiary education between students of second-generation migrants and their indigenous peers in France and Germany varies.

Several factors contribute to this phenomenon, at the systemic level including housing and social policies, institutional features of the education system and school system, *etc.*; at the individual student level regarding students' learning disposition, socioeconomic status and language proficiency, *etc.* (Nusche, 2009). Among them, education is considered as a robust measure of social integration, which could be verified by international organisations' policy recommendations (Hajisoteriou & Neophytou, 2022). Specifically, the structural characteristics of the education system, in terms of school choice, tracking, selection mechanisms and unequal resource distributions, can lead to segregation and have a disproportionately adverse effect on students with migratory backgrounds (Nusche, 2009). Particularly, tracking is of great importance in the education system, functioning as an effective mechanism of stratification, which refers to dividing children formally or informally into different pathways of education, in the form of classes or schools through various distinctions of academically oriented or vocationally oriented knowledge (Crul et al., 2013). In other words, the type of track that an individual choose normally shapes routeway to further education or training institutions. Therefore, the role tracking plays in the education system is of great interest and in the individual future development is influential. However, there is little hard evidence in the literature about the impact of the tracking system on second-generation migrants' accessibility to higher education, hence further analysis is required to address this gap. In sum, it remains to be proved in this essay whether structural differences in tracking systems lead to differences in the likelihood of access to higher education between second-generation migrants and native students in different countries.

Outlining the content of this essay, the first section will give an overall introduction to the French and German education systems. Following that, methodology that might be performed to address this issue will be explained – contrast of context, along with cultural reproduction theory. A comparison of tracking systems in France and Germany will be concretely illustrated, as well as an analysis of the possibility of attending higher education for students with migratory backgrounds and their native counterparts between France and Germany. Then a brief conclusion will be given in the last part.

1.1 Background

After the Second World War, there was an immense influx of immigrants into Europe, especially into Germany, France, the Netherlands, and the United Kingdom, *etc.* (Fassmann & Münz, 1994; Zaiceva & Zimmermann, 2008, *etc.*). France and Germany have been the main immigration countries in Europe since the 1960s; and have relatively high permanent immigration inflows among European countries,

up to a figure of 200,000 in 2005, and remain relatively high volume (see Figure 1, OECD, 2023a). Possible explanations for the very steep decline in Germany since 2016 are a response to the closure of the Balkan route, the migrant deal change between the EU and Turkey (BBC, 2017) and the hardening migration stance (The Guardian, 2016). Despite that, Germany and France continue to be the main destinations of immigration in Continental European, and second-generation migrants represent a relatively large proportion of the population (Eurostat, 2023a).

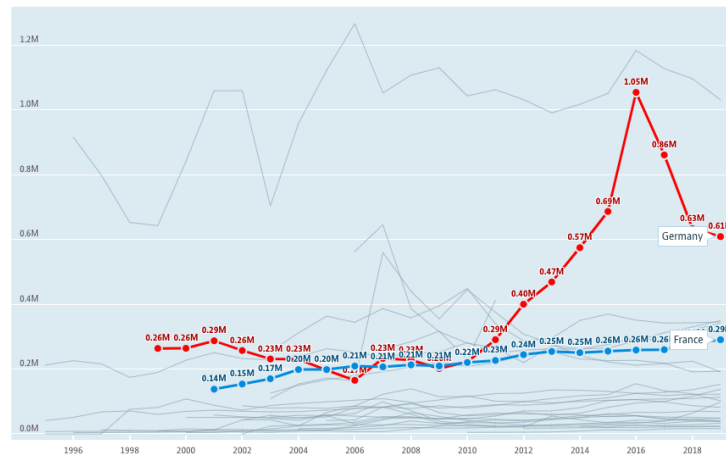


Figure 1. Permanent Immigrant Inflows in EU Countries, 1996-2019

Source: OECD, 2020

The first post-war migrant flows consisted of former colonial returnees, labourers, refugees and asylum seekers or elites (Fassmann & Münz, 1994), and nowadays their descendants have entered young and middle adulthood. Since the issue of migrant assimilation and incorporation into the receiving society will reframe racial-ethnic inequalities, the emergence of second-generation immigrants poses more complicated challenges to host countries from all aspects of society, in terms of education, labour market and welfare policy, and other aspects. As PISA studies have shown, a huge gap in academic achievement between students of second-generation migrants and their native peers can be found, students from native backgrounds consistently outperform migrant students in core subjects (OECD, 2006), and this disparity remains evident over time across countries (OECD, 2010; Dustmann, 2012).

Academic achievement is of utmost importance for an individual's future education, which defines whether one can take part in a higher level of education based on the credentials one obtains (Steinmayr et al., 2014). In further terms, inequalities in academic achievement between immigrant and their native peers may have more profound social implications. For example, such inequalities can lead to higher unemployment and relatively lower earnings, since migrants with poorer academic performance may have less access to the labor market, and lower occupational attainment (Heath et al., 2008). These outcomes can be detrimental to social integration and group integration. However, as a multi-compositional construct, academic achievement consists of various outcomes and is influenced

by multiple factors. Among them, the education system is an influential factor that contributes to the differences in academic achievement across countries (OECD, 2006).

In terms of the education system in France and Germany, they have substantial educational system dissimilarities. In France, a strong central character is shown in the education system, as the State's presence is at the core of organization and funding of education. The State establishes the specifics of curricula at all educational levels, appointments, and removals of teachers as civil servants, and is the primary funder of the public education system (Eurydice France, 2023). The structure of the French education system can be clearly illustrated in Figure 2.

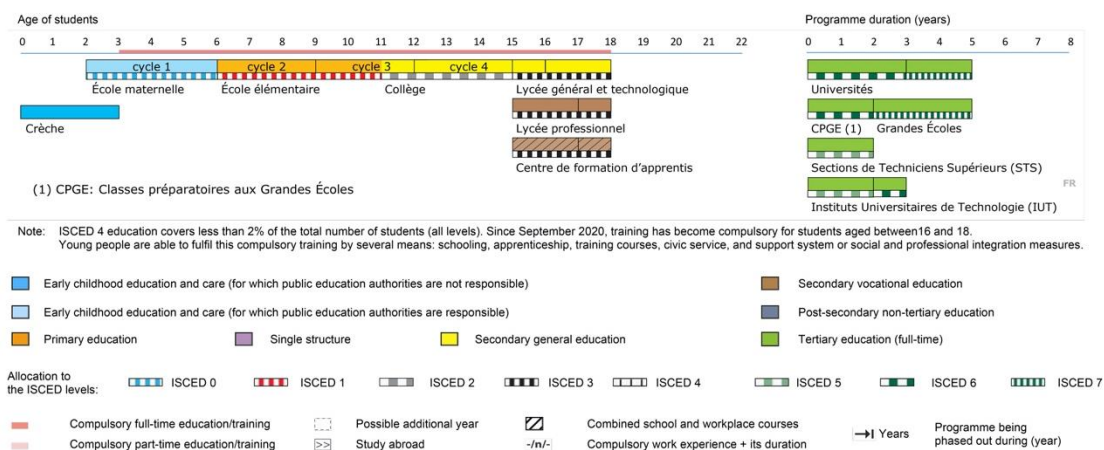


Figure 2. The Structure of French Education System (Eurydice France, 2023)

The compulsory schooling age is from three in nursery schools (*École maternelle*), and French pupils are taught the same subjects from six in elementary schools (*École élémentaire*) to fifteen in lower secondary school (*Collège*) (Eurydice France, 2023). As for the transition from primary school to secondary school, at the end of primary education, there is no examination to determine transfer to lower secondary education in France (Eurydice France, 2022a). After the end of lower secondary education, pupils are streamed to attend either a general, technological, or vocational *lycées* in the following three years to obtain a *baccalauréat* diploma which entitles them to enrol in tertiary education (Eurydice France, 2023). Pupils who study at the general pathway (*lycée général*) are prepared for long-term higher education studies; those who complete their upper secondary schooling at the technological pathway (*lycée technologique*) will enter a *Grande École* or continue to study for a vocational bachelor's degree; and those who at the professional pathway (*lycée professionnel* and *centre de formation d'apprentis*) may lead direct to working life or upgrade their qualifications as what they may obtain in the technological stream (Eurydice France, 2022c). In short, students in the technological track and the professional track are less likely to enter the *Grandes Écoles* than those in the academic track.

However, in Germany, the responsibilities of education are divided between the Federation and the states (*Länder*) (Eurydice Germany, 2023a), and states are the main players in education policy. The Basic Law

specifies the scope of the Federal Government's responsibilities in education, which include funding for students and teachers as well as other areas of education, science, and research, the responsible for admission to higher education institutions and the awarding of higher education degrees is also included (Eurydice Germany, 2023b). In terms of admission to higher education, the *Länder* may enact laws at variance with the legislation of the Federation, as well as regulates its own early childhood education, school system, higher education, adult education, and continuing education (*ibid.*). The regional states' self-established higher education institutions or institutions with a similar status will not be discussed in detail, since this paper will analyse an overview of the German education system. Generally, the structure of the education system in Germany can be clearly illustrated in Figure 3.

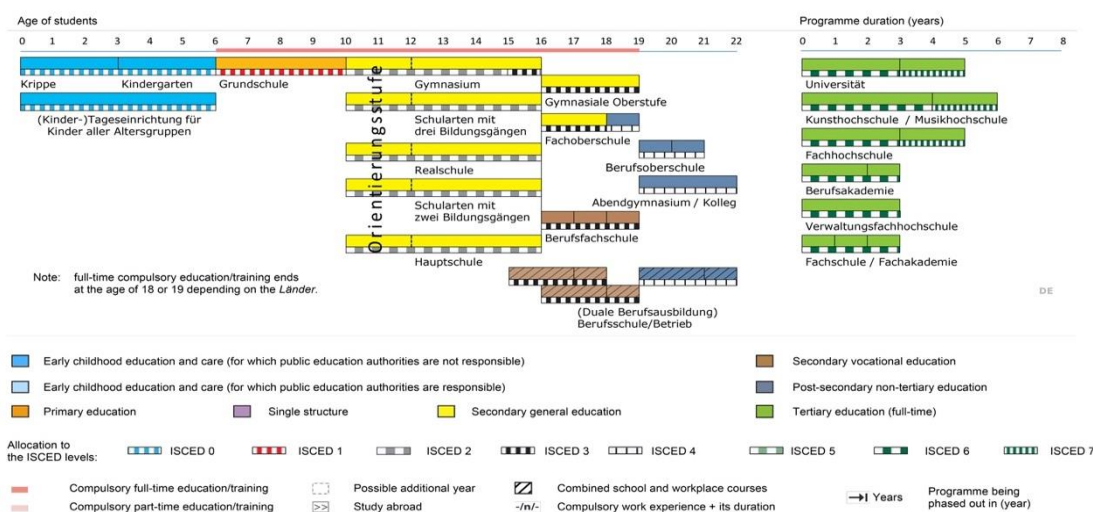


Figure 3. The Structure of German Education System (Eurydice Germany, 2023a)

German pupils start compulsory education at the age of six in primary schools (*Grundschule*) (*ibid.*). After the stage of primary schooling, the provisions vary across *Länder*, basically the second level comprises three types of schools or tracks: *Hauptschule*, *Realschule* and *Gymnasium* (*ibid.*). Additionally, the choice of which type of secondary schooling to be attended is depended on parents' wishes and recommendations of primary school teachers (Worbs, 2003). Each type provides different qualifications at the end of lower secondary education which entitles German students to different types of schools at the stage of upper level, either full-time general education or vocational schools. Concretely, students in grammar schools (*gymnasiale Oberstufe*) will obtain a qualification named *Allgemeine Hochschulreife*, which entitles holders to enter any study course at any institution of higher education and also enables them to start a course of vocational education and training; whereas those who study at vocational schools (*Berufsfachschule*) and attend vocational training in the dual system (*Duales System*) are trained to be qualified staff with a vocational qualification and a higher education entrance qualification (Eurydice Germany, 2023c).

Based on the multiple variations in the French and German education systems, this paper will focus on

whether the differences in the tracking systems of these two countries have contributed to the different accessibility to tertiary education for students of second-generation migrants and indigenous parentage.

2. Methodological and Theoretical Framework

First, this paper will only compare France and Germany, aiming to analyse the similarities and dissimilarities of the tracking system's influence on the availability of tertiary education. Thus, a method of comparing a few countries will be applied. Given that this type of method requires the researcher to pay deeper attention to nuanced differences (Landman, 2008), the result of comparisons will be more intensive and less extensive. Therefore, to address the research question, this paper is inspired by the contrast of context.

This contrast-oriented approach is a method traditionally used in comparative historical research but could also be considered as a qualitative case-oriented method (Thelen & Mahoney, 2015). Based on the orienting questions, a comparison between two or more distinctly different cases will be conducted and find out the unique property of each case, and demonstrate how these unique properties influence the general social processes (Skocpol & Somers, 1980). In other words, it allows for the observation of key variables. While selecting cases, the contrast of contexts seeks more decisively and sharply contradictory differences between or among cases (Skocpol & Somers, 1980). Besides that, this method requires preserving unique sociohistorical features of each individual case and regards a case as an "irreducible whole" (*ibid.*). In this case, the use of systematic and contextualized comparisons is possible and the nuanced differences in each case are magnified, which facilitates the identification of crucial points. All of the characteristics of contrast of context may allow for the unique aspects of each case to be included and protruded in the research and offer opportunities for a clear comparison between or across cases. In conclusion, using the contrast of context enables a deeper comparison between the tracking system of France and Germany, the particularity of each system could be identified, and the impact of unique characteristics of French and German tracking systems on the availability of second-generation migrants to higher education could be examined.

Secondly, this paper is inspired by Bourdieu's cultural reproduction theory, which provides an explanation of the intergenerational reproduction of socioeconomic status. According to Bourdieu (2018), individuals and families have resources of many kinds of capital, including economic, social, and cultural capital, which may be used to create new resources or be transformed. Cultural capital is firstly defined as high-status cultural signals employed in social and cultural selection (Bourdieu & Passeron, 1990), and be expanded as "widely shared, high-status cultural signals attitudes, preferences, formal knowledge, behaviours, goods and credentials used for social and cultural exclusion" by Lamont and Lareau (1988, p. 156), whose function as advance one's position within a social hierarchy composed of people with various capital compositions and quantities (Jæger & Breen, 2016). Furthermore, education is a major sub-domain of society and one in which cultural capital is particularly important (Bourdieu, 2018). Additionally, no system can surpass the important role of the

education system in promoting social reproduction (*ibid.*), which is guaranteed by increasing the possibility of educational success and subsequent socioeconomic success, since adult socioeconomic status is highly influenced by academic achievement (Jæger & Breen, 2016). As tracking is an important mechanism for stratifying students within the education system and shapes the future educational route of individuals, it may be a valuable approach to examine this issue based on the framework of cultural reproduction theory.

3. Comparative Analysis of Context

Educational attainment is an indicator of an individual's highest completed education level and is differed according to an individual's attended schooling. In 2021, the population aged 25-34 with tertiary educational attainment (ISCED 5-8) in European Union is 42% (Eurostat, 2022), while the rate in France and Germany is respectively 50.3% and 35.9% (OECD, 2023b). Specifically, the percentage of the native-born population in the same age group in France is 40.5%, while in Germany this percentage is 29.6% (OECD, 2023c). However, this proportion of second-generation migrants with educational attainment equivalent to ISCED 5-8 shrinks in both countries, 19.2% in France and 10.4% in Germany (Eurostat, 2023b). This reflects there are differences in tertiary educational attainment not only between students of second-generation migrants and their indigenous counterparts but also between France and Germany, as clearly illustrated in Table 1.

Table 1. Percentage of the Population Aged 25-34 with Tertiary Educational Attainment (ISCED 5-8) in 2021

	Overall	Native	SGM
EU	42.0%	-	-
France	50.3%	40.5%	19.2%
Germany	35.9%	29.6%	10.4%

Source: Eurostat, 2022, 2023b; OECD, 2023b, c.

Notes. 'EU' is the abbreviation of the European Union, comprising of 27 countries. 'SGM' is the abbreviation of second-generation migrants. And 'Native' stand for the population without migratory background.

On the other hand, in 2020, the percentage of 20-year-old students studying in tertiary education institutions (ISCED 5-8) in the European Union is 42.0%, in France is 51.7%, whereas this percentage drastically narrows in Germany, which is 30.0% (Eurostat, 2023c). The reason for choosing age 20 as the point of comparison is that some German states may extend their upper secondary schooling to age 19. Thus, choosing 18 years to indicate the percentage of the corresponding age population in higher education may lead to unreliable results. Nevertheless, the relatively low proportion of students of the

appropriate age studying in post-secondary education institutions in Germany, which is lower than the EU average, may indicate a sharp difference in the possibilities of accessing higher education in the two countries. Furthermore, the different accessibility of higher education in France and Germany could also be one of the reasons for the different educational attainment of the two national populations. To figure out one of the possible explanations for this phenomenon, the distinctness in the educational systems of the two countries may yield valuable insights. As mentioned earlier, there are various structural differences between the German and French education systems, which can be depicted in Table 2.

Table 2. Comparisons of National Educational Systems in France and Germany

	France	Germany
Starting Age of Compulsory Schooling	3	6
Transition from Primary School to Lower Secondary School	Students do not need to enter different types of routes	Students need to enter different types of routes: <i>Hauptschule, Realschule</i> and <i>Gymnasium</i>
Transition from Lower Secondary School to Upper Secondary School	Students need to enter different types of routes: general, vocational, or technological <i>lycées</i>	Students need to continue different routes: general or vocational
Prerequisites for Entering Tertiary Education	Completion of upper secondary schooling and get an equivalent diploma	Completion of upper secondary schooling and get an equivalent diploma

Note. Transitioning from lower secondary school to upper secondary school in Germany, there are various types of upper secondary schools, but here are roughly divided into general orientation and vocational orientation. Some scholars may refer to general orientation as academic orientation. To maintain overall consistency, this paper uses the term ‘general’.

As for the starting age of compulsory schooling, French pupils are required to attend pre-primary school (*écoles maternelles*) from the age of 3 years since the start of the 2019 school year (Eurydice France, 2022b), earlier than German students entering compulsory education. Though early childhood care and education programmes can produce long-term improvements in the intellectual and social development of the disadvantaged (Barnett, 1995) and integration of pre-primary education into compulsory schooling stage helps to increase enrolment, it remains questionable whether earlier entry into the compulsory education is more beneficial for second-generation migrant students to enter higher education or not. Furthermore, this integration in France takes place in 2019, with the earliest cohort of beneficiaries newly entering primary school, it is difficult to have sufficient evidence to substantiate

this issue. Besides that, this reformation is of little relevance to the groups of interest in this paper. Thus, although the earliest age of entry into compulsory education currently varies in France and Germany, it can be considered the 'same', in the context of this study.

In terms of prerequisites for entering tertiary education, students who intend to enrol in a higher education institution must complete upper secondary schooling and obtain an equivalent diploma of upper secondary school level, both in France and Germany. However, different types of diploma point to different types of college and university institutions according to Eurydice France (2022c) and Germany (2023c), which signifies that the type of upper secondary school students attended will influence the type of tertiary institutions he/she will enter. Specifically, students in secondary general schools are more likely to enter academic institutions, whereas students in secondary vocational schools are more prone to enter technically oriented or vocationally oriented colleges and universities. Take Germany as an example, the successful *Gymnasium* student will be entitled to a university with *Abitur*; the successful *Realschule* student may qualify for an advanced vocational school with the achievement of *Mittlere Reife*; and few later options remain for *Hauptschule* students (Brauns, 1998; Kerckhoff, 2001). In France, this situation may be a little tenderer: although students are in different orientations, all of them who complete the upper secondary schooling will be qualified for the same educational credential, which is *baccalauréat* as the only prerequisite for entering tertiary education. However, those with a general secondary school background are more probably to be successful in entering higher education (Goux & Eric, 1998). Besides the equivalent diploma of upper secondary level, other factors also affect the accessibility to higher education institutions. In France, despite the same educational credentials students obtain in different pathways, different types of tertiary courses have different entry requirements: university courses are without selection; 'grandes écoles' courses are selected candidates through competitive entrance examinations; and other courses are accessed by selection based on an admission file (Eurydice France, 2022d). French graduates from different types will be led to distinctive occupational positions, among them, students of 'grandes écoles' are the most favourable (Duru-Bellat et al., 2008). However, in Germany, though the type of tertiary institution a student can apply to is determined by the upper secondary school qualifications they have, different types of post-secondary institutions are less vertical ranking than in France. Moreover, it must not be neglected that the development of vocational education in France and Germany is not the same. As vocational education is well-established in Germany, German students in the vocational pathway may have better career prospects and more promising futures than French students (Duru-Bellat et al., 2008), since vocational schools and programmes in Germany have a longer history of development, a better training system and a secure training approach that is more relevant to the needs of economic and societal development (Kerckhoff, 2001). In short, students who study in different types of schools at the secondary level are likely to achieve unequal educational outcomes and social status in the future.

Why do students take different paths? It's because the tracking system is in function. The tracking system is an important approach to social stratification, in other words, "educational institutions sort

students into stratified levels of educational attainment, certified by socially recognized educational credential” (Kerckhoff, 2001, p. 3). As discussed before, the German education system sorts students into *Gymnasium*, *Realschule*, and *Hauptschule*, which could be roughly divided into general and vocational tracks; French classifies students into general, technological and vocational *lycées*. After students enter the different route, there is little possibility for vocational entrants to return to general pathways (Goux & Eric, 1998), which further magnifies the discrepancy between the developmental trajectories of students in the general and vocational tracks. As for the first allocation of different pathways, Germany starts earlier than France, which is at the age of 10, the end of primary education (Eurydice Germany, 2023a); whereas the French system is more comprehensive, students will be taught at the common-core type of institution until age 15 (Eurydice France, 2023). In 2020, no students left lower secondary school earlier in France, while Germany has a dropout rate of 1.36 (Eurostat, 2023d); as for the out-of-school rate in the population of upper secondary school age, it is 7.03 and 11.00 respectively in France and Germany (Eurostat, 2023e), which is probably the most intuitive implication of German earlier tracking. There are heated discussions regarding early tracking, the mainstream view is negative: including, but not limited to, the potential for the early track to exacerbate socioeconomic inequalities (Van de Werfhorst, 2018, 2019), leads to unequal educational attainment and economic outcome (Borghans et al., 2020), leads to economical and/or ethnical segregation (Gamoran, 2009). However, whether earlier tracking in Germany may have brought more separation for students than in France needs further verification.

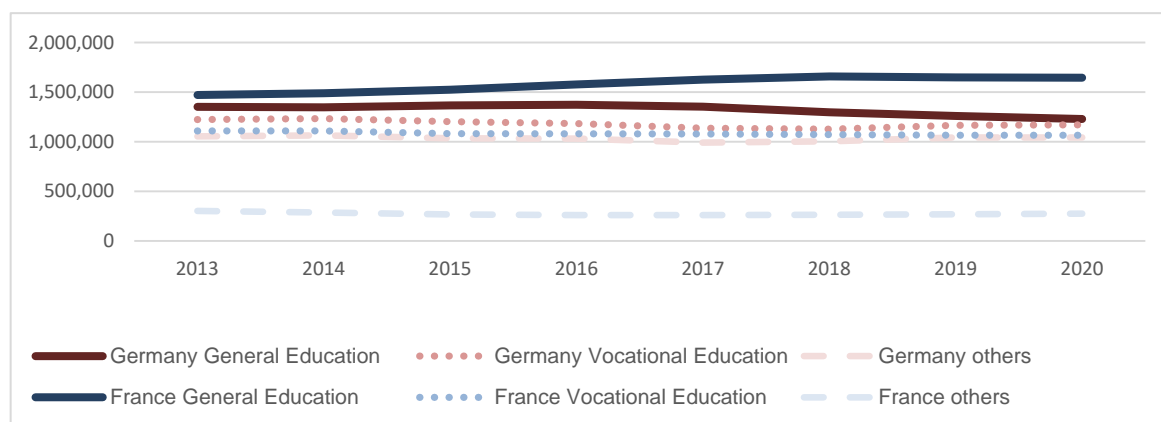


Figure 4. Number of Students Enrolled in Upper Secondary Education by Type of Institution in France and Germany (2013-2020)

Source: Eurostat, 2023g

Note. 1. ‘General education’ refers to programmes which are not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational or technical education programmes. Less than 25 percent of the programme content is vocational or technical. It stands for general and technological *lycées* in France and *Gymnasiale Oberstufe* and *Fachoberschule* in Germany.

2. ‘Vocational education’ refers to programmes which prepare participants for direct entry, without further training, into specific occupations. It refers to professional *lycées* in France and *Berufsfachschule* in Germany. 3. ‘Others’ refer to school and vocational-based vocational programmes, which is equivalent to *centre de formation d’apprentis* in France and *duales* schools in Germany.

As illustrated in Figure 4, three types of upper secondary institutions are divided, general, vocational and others. In terms of numbers, the majority of French students are more willing to enrol in general schools, much higher than in the vocational pathway; while the number of German pupils who enrol in the general track is slightly higher than that in the vocational way. This difference may be the result of the different levels of development of vocational education in France and Germany, as well as the different levels of social acceptance of vocational education. The number of students who enrol in different types of upper secondary school is relatively stable, with a small decrease in students who enter the general track appears since 2017, whereas a steady increase beginning in 2018 is shown in the number of French students in the general pathway, which are responses to educational reforms, as Germany devotes more effort to improving the quality of vocational education (Eurydice, 2021) and France emphasise the importance of the development of general and technological pathway (OECD, 2019). Despite that, these two countries show large differences in the proportion of students entering different types of high school, which is shown clearly in Figure 5 as a comparison based on statistics of 2020. Germany has a more equal share of students entering the three different types of school, while in France more than half of the students enter the general pathway. Possible explanations for this phenomenon may be development status of vocational education and training between France and Germany is various, as Germany has established a vocational education and training system for a long period, while the development of French vocational training is relatively weak, this distinctiveness may also influence the choice of schools for students and their parents.

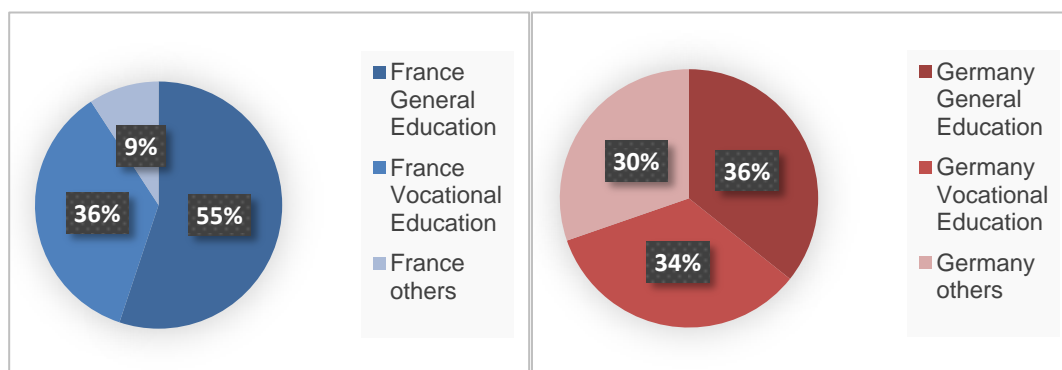


Figure 5. Percentage of Pupils Enrolled in Upper Secondary Education by Type of Institution in France and Germany (2020)

Source: Eurostat, 2023g

Furthermore, in 2021, the proportion of students aged 20-24 in higher education in France is 35.9%, while that in Germany is 32.6% (Eurostat, 2023f), which is slightly lower than the former. Specifically, in terms of the distribution of students in tertiary institutions, a large contrast can be seen, which is demonstrated in Figure 6 and Figure 7.

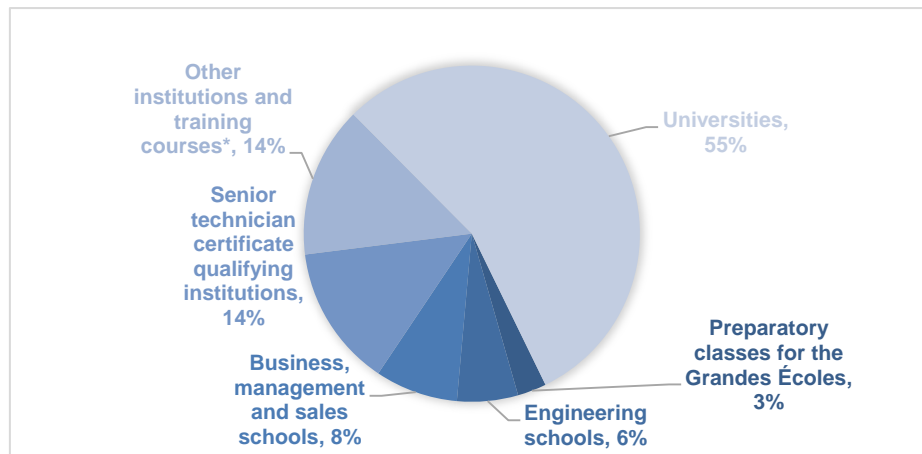


Figure 6. Distribution of Students Enrolled in Higher Education Institutions in France by Type of Institution in 2021/2022

Source: UCL Statista France, 2022

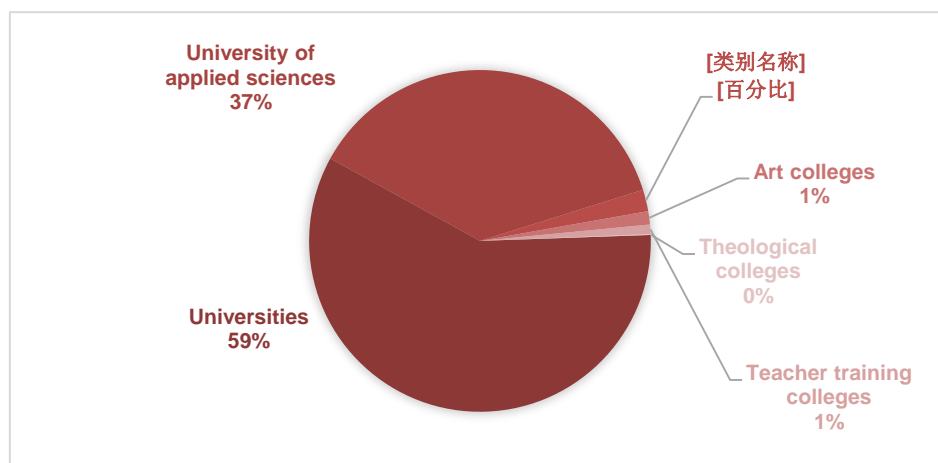


Figure 7. Distribution of Students Enrolled in Higher Education Institutions in Germany by Type of Institution in 2021/2022

Source: UCL Statista Germany, 2022

More than half of French students attend universities and are more concentrated in this division, since universities in France refer to scientific, cultural and professional institutions (Eurydice France, 2022d), which is similar to a collection of all disciplines. However, while more than half of German students also enter universities, more than thirty percent go to universities of applied technology. Universities in

Germany are focusing on basic and theoretical academic research and universities of applied technology offer courses that emphasise practical application (Eurydice Germany, 2023d). The previous one is only open to students who graduate from the general track, the latter one is more vocational-oriented. Hence, in conjunction with what has been mentioned above, the tracking system in Germany starts earlier than in France, which has had a more sustained impact on students' trajectory of education and has had a stronger impact on the tertiary level.

To draw a conclusion, after a coarse comparison of the education system in France and Germany, the tracking system is influential and plays an important role in diverging trajectory of students in both countries. An analysis of the data shows that the German tracking system has had a greater and more profound impact on student's educational trajectory. However, whether tracking in Germany has a great impact on second-generation students and their counterparts than in France needs further examination.

4. Comparative Analysis between Students of Second-Generation Migrants and of Native Parentage

Table 1 indicates that indigenous aged 25-34 are more likely to get a tertiary credential compared to second-generation migrants, both in France and Germany. Specifically, in Germany, students with migratory backgrounds are less likely to access higher education. At the same time, the distinction between students of native parentage and of migrant parents is larger in Germany, which is more than twenty percent. From this, an assumption could be drawn, which is the possibility of obtaining a tertiary educational credential varies between students of second-generation migrants and their native counterparts, also between two countries.

Multiple factors may have a correlation with the acquisition of higher education qualification, the foremost factor is to get access to tertiary education, and the completion of the tertiary study is subordinate. One of the indicators that can be used to measure completion of tertiary schooling is the dropout rate, i.e., whether students terminate their studies early and leave without an equivalent credential. Brinbaum and Guégnard (2013) state that the dropout rates from higher education institutions are higher among second-generation immigrants than their native peers (Frickey et al., 2002), which is verified by France case and the same applies to Germany (Ebert & Heublein, 2017).

As for the accessibility to tertiary education, it is influenced by a number of issues. For instance, at the level of the system, educational policies determine the criteria and regulate the matriculation process, an education system that stratifies students before the stage of higher education; at the level of the individual, previous educational attainment directly influences since the prerequisite of the entrance is the completion of upper secondary schooling, and socioeconomic background, gender, and ethnicity, *etc.* As discussed earlier, France and Germany have relatively dissimilar tracking systems, which lead to unequal opportunities to attend higher education for French and German students. However, whether this also differentiates the accessibility to higher education for second-generation migrant students and their indigenous counterparts is to be further confirmed.

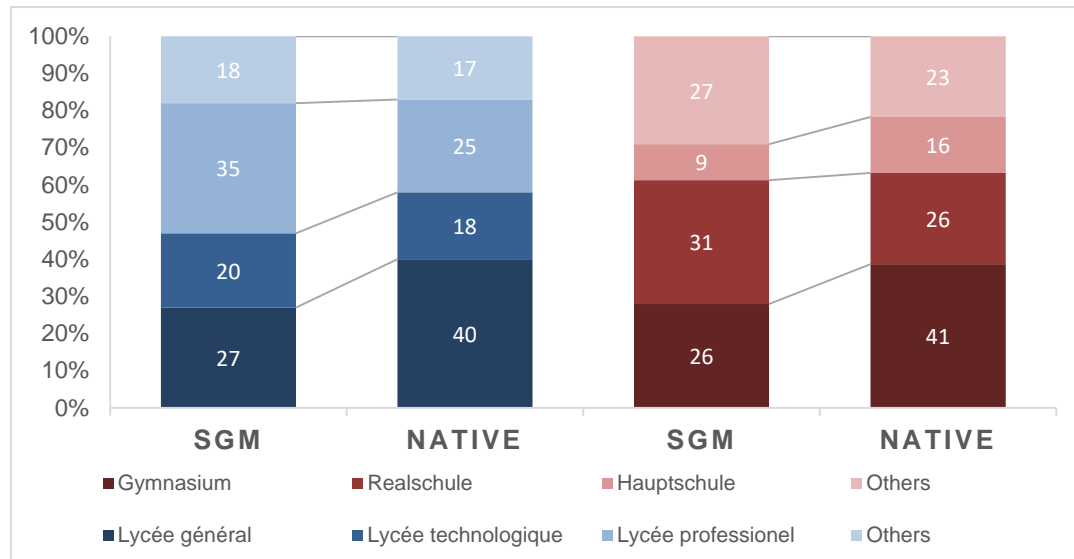


Figure 8. Percentage of Second-generation Migrant Students and Native Students Participating in Different Types of Secondary Schools in France^a and Germany^b

Source: a. Ministère de l'Éducation nationale 2002 (Caille, 2005)

b. PISA 2012 (Nationaler Bildungsbericht, 2016)

Note. 1. 'SGM' stands for second-generation migrant students, 'NATIVE' is equal to native students.

2. Due to limitations in data availability, the years of data statistics for the two countries are not the same, statistics for France was collected and transformed in 2002, that for Germany was collected and transformed in 2012.

Figure 8 intuitively demonstrates the influence of the tracking system, with a crystal-clear difference showing in the percentage of second-generation migrant students attending different types of schools compared to students of native parentage. In the stage of pre-higher education, students of second-generation migrants are more probably to be stratified into lower tracks, since the percentage of them who attend *Gymnasium* and *Lycée général* is much smaller than their native peers, while they process a larger proportion in *Realschule* and *Lycée professionnel*. This suggests that the tracking system puts second-generation migrant students at a disadvantage compared to native students even before the stage of higher education, as they are more probably to enter a lower track. Combined with previous discussions, this earlier distinction prior to the tertiary level also has the potential to further widen the differences in access to tertiary education between students of second-generation migrants and their native counterparts.

At this point, the answer to the question can be obtained for this article, which is that the tracking system is indeed influencing the possibility of attending higher education. Generally, not only does it have an impact on all students in both countries, but it has a stronger impact on second-generation migrant students. From the beginning, second-generation migrants are more likely to be placed on a lower track than their native peers, and this transmitted effect further influences each subsequent stage

of education, as the education system itself has its stratification effect that causes students with migrant backgrounds who are already on a lower track to leave school earlier. While there is no direct data on the share of second-generation migrant students and indigenous students in post-secondary education institutions, it can be inferred from the proportion of second-generation migrant students and native students gaining tertiary education credentials in the two countries that second-generation immigrant students may be less likely to enter higher education institutions. Despite that second-generation migrant students have a higher dropout rate from tertiary education than their native peers, one thing remains undeniable: second-generation migrant students will have fewer opportunities to enter tertiary education under the impact of the tracking system. In sum, tracking does impact disproportionately the possibility of second-generation migrant students. Comparing the impact of the French and German tracking systems on second-generation migrant students, the German one has a greater impact when evaluated on the indicator of the proportion of tertiary educational credentials (see Table 1). This may be due to its higher level of differentiation, higher level of stratification and rigidity, since German students are divided into different orientations of educational pathways earlier than French students, and the distinctiveness between different types of tracks is sharp.

However, it should not be underestimated that individual-level factors might also have an influential impact on the chance of continuing post-secondary studies. Based on Bourdieu's cultural reproduction theory, besides the education system, other cultural capital also contributes to the intergenerational transition. As second-generation migrant students whose parents immigrated from other countries and settled in the host country, due to language and cultural barriers, those migrant parents may be in a relatively disadvantaged position compared to indigenous parents in terms of access to and exchange of information, social connection. The tracking system in both France and Germany is dependent on parental choice, which is closely linked to access to information and social networks. Moreover, if the parental immigration status is removed but take socioeconomic background into consideration, some local children from lower-income groups are also disadvantaged (Ebert & Heublein, 2017). Since the accessibility of tertiary education is correlated to various factors, if social, cultural and economic capital are totally taken into account, it is possible that the impact of the tracking system will diminish or disappear, but it may also be further magnified, which desires further research.

5. Conclusion

This essay set out to analyse the impact of the tracking system on the opportunities to enter tertiary education for students of second-generation migrants and their native counterparts in France and Germany, aiming to figure out similarities and dissimilarities between the tracking systems of the two countries and their differential influence. After comparisons of the French and German education systems and some highly relevant indicators, these results indicate that the tracking system in Germany has an earlier starting point, a higher level of differentiation and stratification. The second finding verifies that the tracking system influences the accessibility to higher education, as different tracks

prior to the tertiary level will affect a student's prospects of entering higher education, with students in the general pathway having a greater likelihood of enrolling in tertiary institutions. Generally, second-generation migrant students are more likely to be divided into lower tracks than those indigenous students, therefore, their likelihood of entering higher education is correspondingly limited. Moreover, earlier tracking is likely to further exacerbate this negative impact. In Germany, the gap in access to higher education is much greater between these two groups. Although Germany as a whole has a smaller percentage of students who have achieved a higher education degree than France, the percentage of second-generation migrant students with tertiary credentials is even smaller. These findings reported here shed new light on approaches to promoting social integration, namely, striving to provide more equal educational opportunities for migrant and non-migrant students at all stages of education at the level of the system.

However, individual-level variables are not considered in this paper, whether those variables influence the accessibility to tertiary education needs to be further explored. Therefore, future research on second-generation migrant students will need to focus not only on systematic factors but also on individual characteristics. Based on national comparisons, group analysis is conducted on individual factors such as different socio-economic conditions and ethnicities to examine the impact of these individual factors. In addition, only two European countries with a tracking system are selected for comparison in this paper, France and Germany have relatively similar socio-economic history conditions, further studies can select more countries as samples. Adding countries with similar socio-economic backgrounds but without tracking systems as a reference may further enhance the reliability of the results. Moreover, the year of data used in this paper is messy, since fewer institutions collect data on second-generation migrants, which may reduce the credibility of the analytical results. Future research can also collect statistics based on large-scale international education surveys but requires very detailed data on the individual socio-economic conditions of the respondents and their education status at various stages.

References

- Barnett, W. S. (1995). Long-term effects of early childhood programs on cognitive and school outcomes. *The future of children*, 25-50. <https://doi.org/10.2307/1602366>
- BBC. (16 January 2017). *Migrant crisis: Germany sees massive drop in asylum seekers*. Retrieved April 27, 2023, from <https://www.bbc.co.uk/news/world-europe-38584705>
- Borghans, L., Diris, R., Smits, W., & de Vries, J. (2020). Should we sort it out later? The effect of tracking age on long-run outcomes. *Economics of Education Review*, 75, 101973. <https://doi.org/10.1016/j.econedurev.2020.101973>
- Bourdieu, Passeron, J. C., & Nice, R. (1990). *Reproduction in education, society, and culture*. Pierre Bourdieu and Jean-Claude Passeron; translated from the French by Richard Nice; with a foreword by Tom Bottomore. (1990 ed. / preface by Pierre Bourdieu.). SAGE.

- Bourdieu, P. (2018). *Cultural reproduction and social reproduction*. In Knowledge, education, and cultural change (pp. 71-112). Routledge. <https://doi.org/10.4324/9781351018142-3>
- Bourdieu, & Bourdieu, P. (2021). *Forms of capital* / Pierre Bourdieu ; edited by Patrick Champagne and Julien Duval with the collaboration of Franck Poupeu and Marie-Christine Revière ; translated by Peter Collier (Bourdieu, Ed.). Polity Press.
- Brauns, H. (1998). Vocational education in Germany and France. *International Journal of Sociology*, 28(4), 57-98. <https://doi.org/10.1080/15579336.1998.11770186>
- Brinbaum, Y., & Guégnard, C. (2013). Choices and enrollments in French secondary and higher education: Repercussions for second-generation immigrants. *Comparative Education Review*, 57(3), 481-502. <https://doi.org/10.1086/670729>
- Caille, J. P. (2005). Les projets d'avenir des enfants d'immigrés. *Les immigrés en France*, 11-22.
- Crul, Fibbi, R., Fleischmann, F., Fokkema, T., Groenewold, G., Gómez, R. A., Hamel, C., ... Wilmes, M. (2013). *The European Second Generation Compared: Does the Integration Context Matter?* (Crul, F. Lelie, & J. Schneider, Eds.). Amsterdam University Press. <https://doi.org/10.1515/9789048516926>
- Crul, M. (2013). Snakes and ladders in educational systems: Access to higher education for second-generation Turks in Europe. *Journal of Ethnic and Migration Studies*, 39(9), 1383-1401. <https://doi.org/10.1080/1369183X.2013.815388>
- Duru-Bellat, M., Kieffer, A., & Reimer, D. (2008). Patterns of social inequalities in access to higher education in France and Germany. *International journal of comparative sociology*, 49(4-5), 347-368. <https://doi.org/10.1177/0020715208093081>
- Dustmann, C., Frattini, T., & Lanzara, G. (2012). Educational achievement of second-generation immigrants: an international comparison. *Economic Policy*, 27(69), 143-185. <https://doi.org/10.1111/j.1468-0327.2011.00275.x>
- Ebert, J., & Heublein, U. (2017). Studienabbruch bei Studierenden mit Migrationshintergrund. Eine vergleichende Untersuchung der Ursachen und Motive des Studienabbruchs bei Studierenden mit und ohne Migrationshintergrund auf Basis der Befragung der Exmatrikulierten des Sommersemesters. Deutsches Zentrum für Hochschul. Wissenschaftsforschung GmbH.
- European Migration Network (EMN). (n.d.). *Second-generation migrant. Migration and Home Affairs*. Retrieved May 3, 2023, from https://home-affairs.ec.europa.eu/networks/european-migration-network-emn/emn-asylum-and-migration-glossary/glossary/second-generation-migrant_en
- Eurostat. (2022). Statistics explained: *Educational attainment statistics. Statistics Explained*. Retrieved May 5, 2023, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Educational_attainment_statistics#The_populations_in_the_EU_Member_States_have_different_educational_attainment_levels_in_2021

- Eurostat. (2023a). *Foreign-born people and their descendants - main characteristics*. Retrieved April 29, 2023, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Foreign-born_people_and_their_descendants_-_main_characteristics#Overview_by_migration_status
- Eurostat. (2023b). *Population by educational attainment level of the parents, sex, age, migration status and educational attainment level (online data code: LFSO_21EDUC08)*. Retrieved May 11, 2023, from https://ec.europa.eu/eurostat/databrowser/view/LFSO_21EDUC08__custom_6096084/default/bar?lang=en
- Eurostat. (2023c). *Students in tertiary education by age groups - as % of corresponding age population (Online data code: EDUC_UOE_ENRT07)*. Retrieved May 11, 2023, from https://ec.europa.eu/eurostat/databrowser/view/EDUC_UOE_ENRT07__custom_6159503/default/table?lang=en
- Eurostat. (2023d). *Out-of-school rate in population of lower secondary school age, by sex (online data code: EDUC_UOE_ENRA28)*. Retrieved May 12, 2023, from https://ec.europa.eu/eurostat/databrowser/view/EDUC_UOE_ENRA28/default/table?lang=en&category=educ.educ_part.educ_uoe_enr.educ_uoe_enra
- Eurostat. (2023e). *Out-of-school rate in population of upper secondary school age, by sex (online data code: EDUC_UOE_ENRA29)*. Retrieved May 12, 2023, from https://ec.europa.eu/eurostat/databrowser/view/EDUC_UOE_ENRA29/default/table?lang=en&category=educ.educ_part.educ_uoe_enr.educ_uoe_enra
- Eurostat. (2023f). *Students in tertiary education - as % of 20-24 years old in the population (online data code: EDUC_UOE_ENRT08)*. Retrieved May 12, 2023, from https://ec.europa.eu/eurostat/databrowser/view/EDUC_UOE_ENRT08__custom_6185094/default/table?lang=en
- Eurostat. (2023g). *Pupils enrolled in upper secondary education by programme orientation, sex, type of institution and intensity of participation (online data code: EDUC_UOE_ENRS04)*. Retrieved May 12, 2023, from https://ec.europa.eu/eurostat/databrowser/view/EDUC_UOE_ENRS04/default/table?lang=en&category=educ.educ_part.educ_uoe_enr.educ_uoe_enrs
- Eurydice. (2021). *The Education System in the Federal Republic of Germany 2018/2019*. Kultusminister Konferenz. Retrieved from https://www.kmk.org/fileadmin/Dateien/pdf/Eurydice/Bildungswesen-engl-pdfs/dossier_en_eboo.pdf
- Eurydice France. (2022a). *Assessment in primary education*. Retrieved April 10, 2023, from <https://eurydice.eacea.ec.europa.eu/national-education-systems/france/assessment-primary-education>

- Eurydice France. (2022b) 4. *Early childhood education and care*. Eurydice France. Retrieved May 11, 2023, from <https://eurydice.eacea.ec.europa.eu/national-education-systems/france/early-childhood-education-and-care>
- Eurydice France. (2022c). 6. *Secondary and post-secondary non-tertiary education*. Eurydice France. Retrieved May 5, 2023, from <https://eurydice.eacea.ec.europa.eu/national-education-systems/france/secondary-and-post-secondary-non-tertiary-education>
- Eurydice France. (2022d). 7. *Higher education*. Eurydice France. Retrieved May 12, 2023, from <https://eurydice.eacea.ec.europa.eu/national-education-systems/france/higher-education>
- Eurydice France. (2023). *Overview*. Retrieved April 10, 2023, from <https://eurydice.eacea.ec.europa.eu/national-education-systems/france/overview>
- Eurydice Germany. (2023a). *Overview*. Retrieved April 10, 2023, from <https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/overview>
- Eurydice Germany. (2023b). 2. *Organisation and governance*. Retrieved April 15, 2023, from <https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/organisation-and-governance>
- Eurydice Germany. (2023c). 6. *Secondary and post-secondary non-tertiary education*. Retrieved May 5, 2023, from <https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/secondary-and-post-secondary-non-tertiary-education>
- Eurydice Germany. (2023d). 7. *Higher education*. Retrieved May 12, 2023, from <https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/higher-education>
- Fassmann, H., & Münz, R. (1994). *Patterns and Trends of International Migration in Western Europe*. European migration in the late twentieth century. Edward Elgar. <https://doi.org/10.4337/9781035303106.00008>
- Frickey, A., Primon, J. L., & Marchal, N. (2002). Jeunes issus de l'immigration: les diplômés de l'enseignement supérieur ne garantissent pas un égal accès au marché du travail. *Formation emploi*, 79(1), 31-49. <https://doi.org/10.3406/forem.2002.2490>
- Gamoran, A. (2009). *Tracking and inequality: New directions for research and practice* (pp. 213-228). Routledge.
- Goux, D., & Eric, M. (1998). *From Education to First Job: The French Case*. in Yossi Shavit and Walter Muller, *From School to Work: A Comparative Study of Educational Qualifications and Occupational Destinations*. Oxford, England: Clarendon Press.
- Hajisoteriou, C., & Neophytou, L. (2022). The role of the OECD in the development of global policies for migrant education. *Education Inquiry*, 13(2), 127-150. <https://doi.org/10.1080/20004508.2020.1863632>

- Heath, A. F., Rothon, C., & Kilpi, E. (2008). The second generation in Western Europe: Education, unemployment, and occupational attainment. *Annu. Rev. Sociol.*, 34, 211-235. <https://doi.org/10.1146/annurev.soc.34.040507.134728>
- Jæger, M. M., & Breen, R. (2016). A dynamic model of cultural reproduction. *American Journal of Sociology*, 121(4), 1079-1115. <https://doi.org/10.1086/684012>
- Kerckhoff, A. C. (2001). Education and social stratification processes in comparative perspective. *Sociology of education*, 3-18. <https://doi.org/10.2307/2673250>
- Lamont, M., & Lareau, A. (1988). Cultural capital: Allusions, gaps and glissandos in recent theoretical developments. *Sociological theory*, 153-168. <https://doi.org/10.2307/202113>
- Landman, T. (2008). *Issues and methods in comparative politics: an introduction*. Routledge. <https://doi.org/10.4324/9780203929780>
- Nationaler Bildungsbericht. (2016). *Bildung und Migration*. Bildung in Deutschland. Retrieved from <https://www.bildungsbericht.de/de/bildungsberichte-seit-2006/bildungsbericht-2016/pdf-bildungsbericht-2016/bildungsbericht-2016>
- Nusche. (2009). *What Works in Migrant Education?: A Review of Evidence and Policy Options*. Deborah Nusche. OECD Publishing. <https://doi.org/10.1787/227131784531>
- OECD. (2006). *Where Immigrant Students Succeed: A Comparative Review of Performance and Engagement*. in PISA 2003 OECD Publishing. <https://doi.org/10.1787/9789264023611-en>
- OECD (2010), *Closing the Gap for Immigrant Students: Policies, Practice and Performance (Summary)*. OECD Publishing, Paris, <https://doi.org/10.1787/9789264075788-sum-en>.
- OECD. (2019). *Home. France | Education Policy Outlook 2019: Working Together to Help Students Achieve their Potential | OECD iLibrary*. Retrieved from <https://www.oecd-ilibrary.org/sites/6feb34c0-en/index.html?itemId=%2Fcontent%2Fcomponent%2F6feb34c0-en>
- OECD (2023a). *Permanent immigrant inflows (indicator)*. <http://doi.org/10.1787/304546b6-en>
- OECD (2023b). *Population with tertiary education (indicator)*. <http://doi.org/10.1787/0b8f90e9-en>
- OECD (2023c). *Education at a glance: Education, migration and labour market outcomes*. OECD Education Statistics (database). <https://doi.org/10.1787/3ccf1482-en>
- Siahaan, F., Lee, D. Y., & Kalist, D. E. (2014). Educational attainment of children of immigrants: Evidence from the national longitudinal survey of youth. *Economics of Education Review*, 38, 1-8. <https://doi.org/10.1016/j.econedurev.2013.10.001>
- Skocpol, T., & Somers, M. (1980). The uses of comparative history in macrosocial inquiry. *Comparative studies in society and history*, 22(2), 174-197. <https://doi.org/10.1017/S0010417500009282>
- Spicer, N. (2008). Places of exclusion and inclusion: Asylum-seeker and refugee experiences of neighbourhoods in the UK. *Journal of ethnic and migration studies*, 34(3), 491-510. <https://doi.org/10.1080/13691830701880350>

- Steinmayr, R., Meißner, A., Weideinger, A. F., & Wirthwein, L. (2014). *Academic achievement* (pp. 9780199756810-0108). Oxford, UK: Oxford University Press. <https://doi.org/10.1093/obo/9780199756810-0108>
- Thelen, L., & Mahoney, J. (2015). *Comparative-historical analysis in contemporary political science*. In *Advances in Comparative-Historical Analysis* (pp. 3-36). Cambridge University Press. <https://doi.org/10.1017/CBO9781316273104.002>
- The Guardian. (2016, December 28). *More than 50,000 migrants left Germany in 2016, says report*. Retrieved April 27, 2023, from <https://www.theguardian.com/world/2016/dec/28/more-than-50000-migrants-left-germany-2016-refugees-christmas-market-attack>
- UCL Statista France. (2022). *Distribution of students enrolled in higher education institutions in France between 2021 and 2022, by type of institution*. Retrieved May 12, 2023, from <https://www.statista.com/statistics/1047897/enrolment-higher-education-france-by-type-institution>
- UCL Statista Germany. (2022). *Number of students in Germany in the winter semester of 2021/22, by type of university*. Retrieved May 12, 2023, from <https://www.statista.com/statistics/584067/student-numbers-by-type-of-university-germany/>
- Van de Werfhorst, H. G. (2018). Early tracking and socioeconomic inequality in academic achievement: studying reforms in nine countries. *Research in Social Stratification and Mobility*, 58, 22-32. <https://doi.org/10.1016/j.rssm.2018.09.002>
- Van de Werfhorst, H. G. (2019). Early tracking and social inequality in educational attainment: Educational reforms in 21 European countries. *American Journal of Education*, 126(1), 65-99. <https://doi.org/10.1086/705500>
- Van de Werfhorst, H. G., & Mijs, J. J. (2010). Achievement inequality and the institutional structure of educational systems: A comparative perspective. *Annual review of sociology*, 36, 407-428. <https://doi.org/10.1146/annurev.soc.012809.102538>
- Worbs, S. (2003). The second generation in Germany: Between school and labor market. *International Migration Review*, 37(4), 1011-1038. <https://doi.org/10.1111/j.1747-7379.2003.tb00168.x>
- Zaiceva, & Zimmermann, K. F. (2008). Scale, diversity, and determinants of labour migration in Europe. *Oxford Review of Economic Policy*, 24(3), 427-451. <https://doi.org/10.1093/oxrep/grn028>